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14. ABSTRACT

CeD photometry in the eight-color Vilnius + I system for 7250 stars down to 1= 19.6 mag has been obtained in the 20' x 26' field of the open cluster IC 361 in Camelopardalis. The catalog of 1420 stars down to V ~ 18.5 mag is presented. It contains the coordinates, V magnitudes and seven color indices, quantitative photometric spectral types, absolute magnitudes and distances. The interstellar extinction is found to be non-uniform across the field, with the values of Av in the range 1.9 to 2.4 mag. The distribution of distance moduli of individual stars shows that the cluster is located as far as, or just beyond, the Perseus spiral arm.

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MULTICOLOR CCD PHOTOMETRY OF THE OPEN CLUSTER IC 361

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Abstract. CCD photometry in the eight-color *Vilnius* + I system for 7250 stars down to $I = 19.6$ mag has been obtained in the $20' \times 26'$ field of the open cluster IC 361 in Camelopardalis. The catalog of 1420 stars down to $V \sim 18.5$ mag is presented. It contains the coordinates, V magnitudes and seven color indices, quantitative photometric spectral types, absolute magnitudes and distances. The interstellar extinction is found to be non-uniform across the field, with the values of A_V in the range 1.9 to 2.4 mag. The distribution of distance moduli of individual stars shows that the cluster is located as far as, or just beyond, the Perseus spiral arm.

Key words: stars: fundamental parameters – Galaxy: open clusters: individual (IC 361)

1. INTRODUCTION

The open cluster IC 361 in Camelopardalis ($\ell = 147.5°$, $b = 5.7°$) is well detached from the field, but because of faintness it has been very poorly studied. The only photometric information published to date is that by Piccirillo & Stein (1978) who obtained in the field of the cluster photoelectric UBV and photographic BV data for 19 and 32 stars, respectively, identified the contours of the main sequence and identified a few red giant stars. Based on these preliminary data they adopted a distance of 2.5 kpc, a high value of reddening, $E_{B-V} = 0.55$, and suggested the age in the range 0.5 to 1 Gyr. IC 361 lies in the second Galactic quadrant, in the immediate vicinity of the Camelopardalis dark clouds. Therefore, it is not surprising that the cluster demonstrates a considerable interstellar reddening. In such a case, the contribution of multicolor medium-band photometry can provide improved determinations of the fundamental parameters of the cluster. For this purpose we have undertaken CCD observations in the *Vilnius* seven-color system in the $20' \times 20'$ field covering the cluster and its immediate surroundings. An I filter of the Cousins photometric system has been added.

In Section 2 we describe our observations in the field of IC 361 and data reduc-

tions. In Section 3 we present the results of photometry. The methods for quantitative classification of individual stars are described in Section 4. The derived spectral types, the values of interstellar extinction and distances to individual stars are given in Table 3. A brief discussion of the results is given in Section 5. The cluster parameters derived with these data will be presented in the forthcoming paper.

2. OBSERVATIONS AND REDUCTIONS

CCD observations in seven filters *U,P,X,Y,Z,V,S* of the *Vilnius* system plus the filter *I* of the Cousins system were carried out in December of 1999 with a 2K CCD camera on the 1 m telescope of the USNO Flagstaff Station (Arizona), which gives a field of the diameter of 20′. Repeated observations in the *Vilnius* filters were done with the same telescope and a new 2K×2K CCD camera in March of 2009. During the latter run we have obtained well-calibrated CCD data only for filters *Y, Z, V, S*, since observations through the remaining three filters on the succeeding night were curtailed by cirrus clouds.

Additional frames in the *Vilnius* filters *U, Y, V* were taken for the central part of the field (12′ × 12′) in December of 2008 with a 4K CCD camera on the 1.8 m Vatican Advanced Technology Telescope (VATT) on Mt. Graham (Arizona).

The exposures taken during the three observing runs are listed in Table 1. Since some exposures were done with a small shift in DEC, the measured field coverage is about 20′ × 26′. Figure 1 shows a Flagstaff exposure in the *I* filter.

Table 1. CCD exposures taken with the Flagstaff 1 m telescope and the VATT.

Filter	λ_0 (nm)	Number of frames × exposure time (in seconds)					
		Flagstaff 1999		Flagstaff 2009		VATT 2008	
U	345	2 × 1800				3 × 1500	3 × 150
P	374	2 × 1800	2 × 300				
X	405	2 × 1800	2 × 300				
Y	466	2 × 360	2 × 60	1 × 720	2 × 600	3 × 200	3 × 20
Z	516	2 × 360	2 × 60	2 × 600			
V	544	2 × 360	2 × 60	2 × 600		3 × 150	3 × 15
S	656	3 × 360	3 × 60	1 × 720	2 × 600		
I	700	3 × 180	3 × 30				

Processing of the Flagstaff data was carried out within the IRAF[1] data reduction software by combining both the aperture and point spread function (PSF) method. Flat-field corrections were obtained from twilight and dome flats. On each of the CCD frames, up to 100 uncrowded stars were selected by multi-aperture photometry to obtain the best fit parameters of the PSF profile. This PSF was then fitted to all detected profiles on each frame. The calibration equations were obtained by observing the standard field of M 67 (Laugalys et al. 2004). For the Flagstaff run 1999 the equations were as follows:

[1]IRAF package (http://iraf.noao.edu) is distributed by the National Optical Astronomy Observatory, USA.

Fig. 1. One of the Flagstaff images of the IC 361 field (20′ × 20′) in the *I* filter. North is up, and east is to the left.

$$V = 1.003\,v - 0.041\,(y - v) - 7.401,$$

$$U - V = 1.012\,(u - v) + 0.006\,(y - v) + 0.464,$$

$$P - V = 1.033\,(p - v) - 0.178\,(y - v) + 0.474,$$

$$X - V = 1.080\,(x - v) - 0.230\,(y - v) + 0.937,$$

$$Y - V = 1.073\,(y - v) + 0.413,$$

$$Z - V = 1.157\,(z - v) + 1.091,$$

$$V - S = 0.916\,(v - s) + 0.550.$$

In these equations, the upper-case letters stand for the magnitudes in the standard system, the lower-case letters indicate the instrumental magnitudes corrected for atmospheric extinction. The Flagstaff data of 2009 were transformed to the 1999 system. The zero-points of color indices and the *V* magnitude in the *Vilnius* system were fixed by using five standard stars in the cluster vicinity observed with a photoelectric photometer on the 1.65 m telescope of the Molėtai Observatory (Zdanavičius & Zdanavičius 2002). The *V–I* system is described in Laugalys et al. (2004). The zero point of *V–I* was fixed using 20 stars selected from the Droege et al. (2006) survey.

The typical single-measurement errors in *V* magnitude for the two Flagstaff runs and the VATT run are compared in Figure 2. It can be seen that the accuracy of our Flagstaff 1999 photometry is much lower than that of the 2009 run. The errors in VATT photometry obtained in the central part of the cluster do not exceed 0.02 mag down to *V*=19.0 mag.

In Figure 3 we show the differences in magnitude *V* between the two Flagstaff runs (left panel) and the differences in color index *U* − *V* between the Flagstaff (average over both runs) and VATT data (right panel). In the final catalog of *Vilnius*

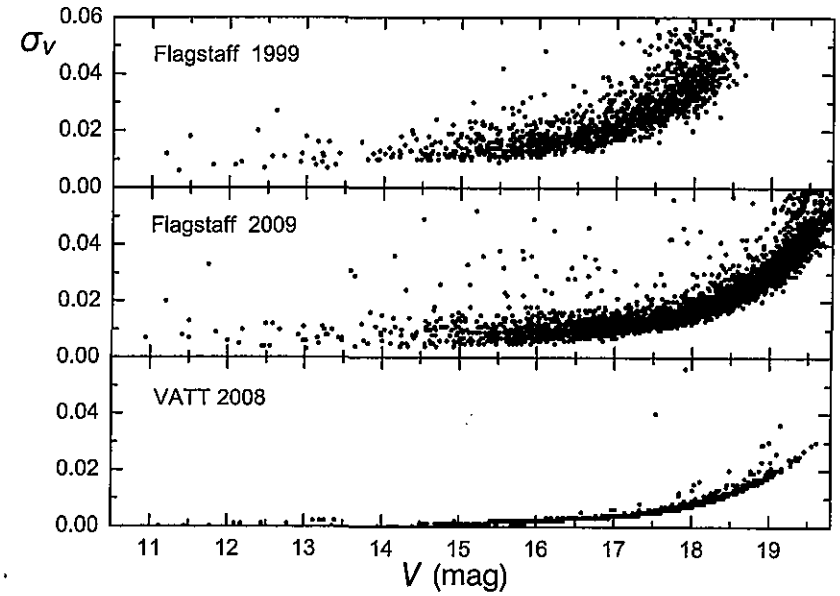

Fig. 2. The single-measurement errors in V from the Flagstaff (two runs) and VATT (central part of the cluster) photometry.

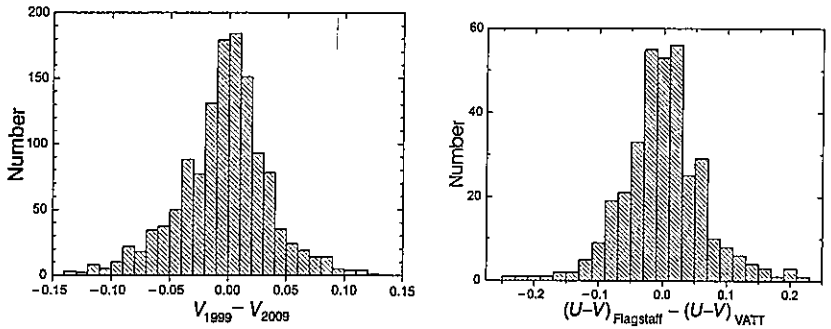

Fig. 3. Differences in magnitude V between the Flagstaff runs of 1999 and 2009 (left panel) and in color index U–V between the Flagstaff (average over both runs) and VATT data (right panel).

photometry (Table 3) the given data are averaged over the three observing runs, Flagstaff 1999, Flagstaff 2009 and VATT 2008, taking into account photometric errors.

To derive the cluster center, a Gaussian function was fit to the distributions of stars on the CCD (in the x- and y-directions) from each exposure in both the V and I filters. The (x,y)-position of the cluster center, acquired in this way, was transformed to the right ascension, declination system using the USNO-B1.0 catalog (Monet et al. 2003) and found to be

$$\alpha = 4^{\rm h}18^{\rm m}55.0^{\rm s},\ \delta = +58°14'53'' \ (\text{J2000.0}).$$

The estimated cluster center is close to the center of our CCD images, but quite different from those given in the WEBDA[2] database or quoted elsewhere in the literature. The (x,y)-coordinates of stars were transformed to the equatorial system (J2000.0) of the same USNO-B1.0 catalog.

3. CATALOG OF PHOTOMETRY

The catalog of V magnitudes and color indices of 1420 stars down to $V \sim 18.5$ mag both in the standard *Vilnius* system and V–I is given in Table 3, together with the results of photometric classification (see Section 4). Only the stars having X, Y, Z and V magnitudes are included. Therefore, a number of fainter (V>18.5) stars having only U, Y, V photometry from the VATT run are not listed. A colon following the magnitude or color index indicates that the rms error is between 0.05 and 0.10 mag, and a double colon stands for errors of 0.1 mag or larger.

The internal rms errors of the catalog, estimated for five magnitude intervals, are given in Table 2. These were calculated by means of repeated observations as

$$\sigma = \pm\sqrt{\frac{\sum_{N=1}^{N}\sum_{i=1}^{n}(\bar{x}-x_i)}{\Sigma n - N}},$$

where $(\bar{x}-x_i)$ is the difference between the mean and the individual measurement of each star, n is the number of multiple observations for each star, and N is the number of stars in the catalog in a given magnitude interval.

Table 2. Internal accuracy of the photometric catalog.

V interval		N_V	σ_V	σ_{U-V}	σ_{P-V}	σ_{X-V}	σ_{Y-V}	σ_{Z-V}	σ_{V-S}	σ_{V-I}
10.00	15.00	91	0.009	0.024	0.021	0.022	0.012	0.013	0.012	0.016
15.00	16.50	350	0.011	0.036	0.030	0.025	0.014	0.016	0.014	0.020
16.50	17.50	468	0.017	0.050	0.045	0.033	0.023	0.021	0.020	0.029
17.50	18.00	324	0.027	0.043	0.071	0.047	0.038	0.030	0.032	0.039
18.00	18.50	201	0.030	0.032	0.094	0.057	0.045	0.035	0.038	0.046

A complete catalog of Flagstaff V,I photometry, which contains 7250 stars down to I=19.6 mag in the 20′ × 20′ field, and the catalog of VATT U,Y,V photometry with 806 stars down to V=19.6 mag in the central part of the cluster field (12′ × 12′), are available in electronic form and can be supplied by the authors on request.

The color-magnitude diagrams for stars common to the VATT U,Y,V and Flagstaff V,I data sets are shown in Figure 4.

4. QUANTITATIVE CLASSIFICATION OF STARS

For the determination of spectral classes, absolute magnitudes M_V and values of interstellar extinction ($A_V = RE_{Y-V}$) of individual stars (we call this process a quantitative classification) we used a few different codes.

[2]http://www.univie.ac.at/webda/

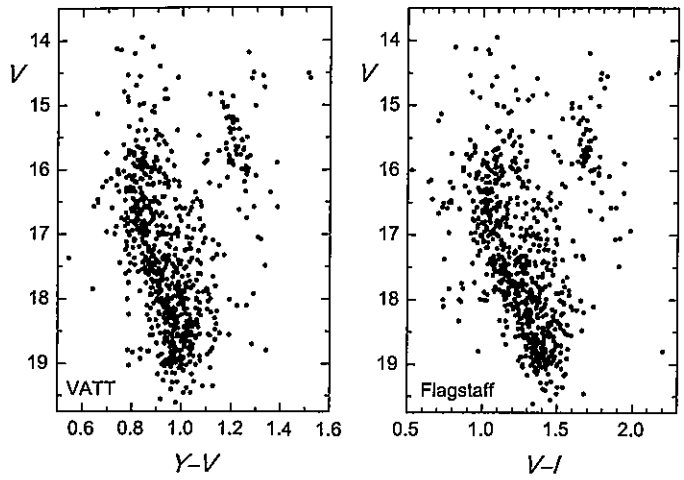

Fig. 4. The V vs. Y–V diagram with the VATT data (left panel) and the V vs. V–I diagram with the Flagstaff data (right panel). The number of stars in each panel – 782.

(1) COMPAR code, based on the so-called σQ-method (Straižys et al. 2001a). The principle of the method is matching 14 different interstellar reddening-free Q-parameters of a program star to those of about 8400 standard stars of various spectral and luminosity classes, metallicities and peculiarity types. This code selects a number of standard stars which have a set of Q-parameters most similar to those of a program star. If the σQ values are sufficiently small (i.e. Q-differences between a program star and the closest standard stars are small), the average parameters of the closest standard stars will be assigned to that program star. σQ is a function of the accuracy of photometry, the uncertainty in stellar parameters of standard stars and the degree of representation of various types of standard stars included. For photometry of Population I stars with the 1% accuracy, σQ is usually of the order of $\pm(0.01 - 0.02)$ mag.

(2) xqKLAS code, based on the so-called xq-method developed by Zdanavičius (2005). The method relies upon a new concept of reddening-free parameters (q) and a 'virtual' quantity of the interstellar dust (x). 1418 standards are formed by calculating the mean dereddened color indices for 89 spectral subclasses (mostly for each one subclass or, in the case of late-type stars, for each 0.25 subclass) and 17 values of the absolute magnitude M_V. The code takes into account the errors of photometry and, as a final result, gives for each program star its spectral type, M_V, interstellar extinction A_V and distance from the sun.

(3) TINKLAS code, which classifies stars using six Q, Q diagrams as described in Straižys (1992). Each of such diagrams is formed from two reddening-free Q-parameters and calibrated in terms of spectral classes and absolute magnitudes.

(4) dxq method, developed recently by one of the authors (K. Z.), uses a combination of ten *Vilnius* color indices of 300 standards of solar chemical composition. These standards represent a variety of spectral and luminosity classes with known mean intrinsic color indices. As a first step, the color indices of each observed star are compared with those of standards to find the differences for each of the ten color indices. Then, using these differences and the color excesses for unit mass of interstellar dust, derived from the interstellar extinction law, the values of dust mass are calculated for each color index of each standard. Finally, the parameters of the standard which gives the least scatter in dust mass calculated using the ten color indices are ascribed to the star under classification.

Spectral classes and absolute magnitudes of program stars determined by methods (2), (3) and (4) were used to estimate luminosity classes according to MK type calibrations in M_V from Straižys (1992). The intrinsic color indices $(Y-V)_0$ used for the determination of E_{Y-V} were also taken from Straižys (1992). The values of A_V were calculated with $R = A_V/E_{Y-V} = 4.16$ for the normal interstellar extinction law (Straižys et al. 2001b).

It should be noted that the above four codes use slightly different sets of spectral standards. However, the comparison of the classifications shows that the four methods give results generally in good agreement. For a total of 1225 stars, the average difference between the spectral classes derived by dxq and COMPAR codes was found to be 1.8 subclasses. For stars of spectral type F5 and later types (268 stars), this difference is only 1.2 subclass. Spectral types of about 50 stars, mainly of early types, differ more than by 5 spectral subclasses. The difference of dereddened and intrinsic color indices calculated by the dxq method is shown in Figure 5.

The results of quantitative classification, i.e. spectral types, the values of interstellar extinction A_V and distances are given in Table 3, together with the catalog of observations. Poor quality classification data (the difference between 0.05 and 0.10 mag) are marked by a colon, and those with larger uncertainties (0.1 mag or larger) are indicated with a double colon. For about 250 stars in the table, mainly of A–G types at fainter magnitudes, no luminosity classes were determined. For these, the intrinsic color indices of luminosity class V were ascribed when calculating the values of interstellar extinction. Since the cluster stars are slightly metal-deficient (Zdanavičus et al. 2009a), the classification using standards of only solar abundances may lead to a slight overestimate of distances.

5. DISCUSSION AND CONCLUSIONS

In Figure 6 (left panel) we show the distribution of individual distance moduli $(m-M)_0$ for the sample of 1225 stars. If we assume that the second peak of the distribution at $(m-M)_0 = 12.8$ mag (as well as the concentration of points in the right-panel diagram) represents the cluster population, we may suggest that IC 361 is located as far as, or just beyond, the Perseus arm. The first peak seen at slightly smaller distance is probably due to unresolved binary stars.

The dependence of interstellar extinction on the distance moduli is demonstrated in the A_V vs. $(m-M)_0$ diagram (right panel of Figure 6). The two principal features to note in this figure are (1) the heavy concentration of points in the vertically elongated area centered approximately at $(m-M)_0 = 12.8$ and $A_V = 2.2$ mag, which can be considered to be the concentration of the cluster members, and (2) the spread of A_V values at this particular distance. It is evident from the scatter that interstellar extinction A_V is non-uniform across the cluster field, with the values of A_V ranging from 1.9 to 2.4 mag.

The evidence for variable extinction also comes from IRAS 100 μm thermal

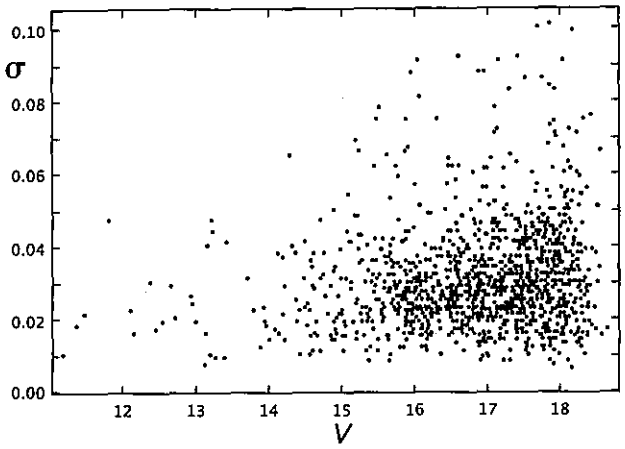

Fig. 5. The mean differences between the dereddened and standard intrinsic color indices of 1225 stars classified by the xdq method.

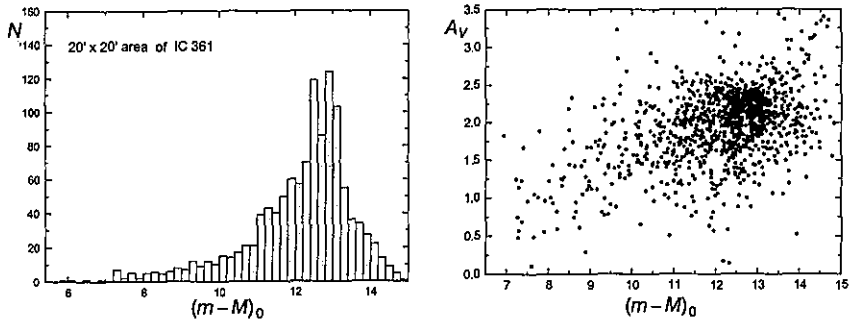

Fig. 6. Distribution of true distance moduli (left panel) and the A_V vs. distance modulus diagram (right panel).

emission image taken from SkyView Virtual Observatory[3], which is shown in Figure 7. According to the reddening calibrations of dust maps by Schlegel et al. (1998), the values of E_{B-V} across IC 361 are in the range 0.79 to 0.90 mag, with corresponding A_V values from 2.4 to 2.8 mag.

A non-uniform extinction across the cluster complicates fitting the color magnitude diagram to theoretical isochrones and, consequently, the determination of age and other basic parameters. In such a case, the use of photometric parameters of individual stars becomes a crucial point. The results of seven-color photometry and quantitative classification of individual stars obtained in the present paper (Table 3) will be used in the forthcoming paper on the fundamental parameters of IC 361.

[3]http://skyview.gsfc.nasa.gov/

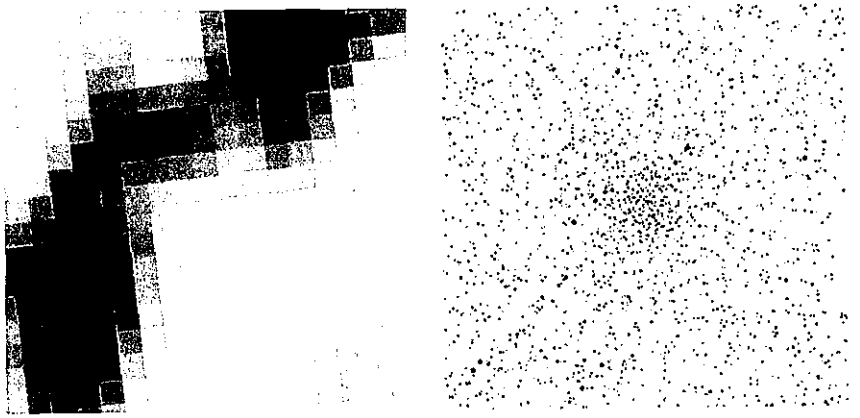

Fig. 7. Left panel: the IRAS 100 μm map of the field around IC 361. Right panel: the cluster image in DSS2 Red. Both maps have the same center and the same size, $25' \times 25'$.

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Table 3. Results of photometry, photometric classification, interstellar extinctions and distances for stars in the IC 361 area.

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	$U-V$ mag	$P-V$ mag	$X-V$ mag	$Y-V$ mag	$Z-V$ mag	$V-S$ mag	$V-I$ mag	Photom. sp. type	A_V mag	d pc
1	4 17 42.3	+58 19 41	16.05	3.87	3.33	2.25	0.98	0.53	0.77	1.29	k3.2 V:	0.61	560
2	4 17 42.4	+58 17 44	15.74	3.68	2.71	1.67:	0.82	0.40	0.57	1.08	a1.5 V:	2.52	2660
3	4 17 42.4	+58 20 33	14.37	3.19	2.59	1.79	0.85	0.37	0.69	1.12	g1.5 IV	0.96	1270
4	4 17 46.7	+58 21 48	17.55		2.72:	1.62	0.86:	0.31:	0.61:	0.94	a1.5 V-III	2.58	5950
5	4 17 46.8	+58 16 52	18.11			1.91:	0.92:	0.46:	0.68:	1.19			
6	4 17 47.3	+58 17 57	18.09			2.05:	1.02:	0.50:	0.67:	1.21			
7	4 17 47.8	+58 16 34	14.85	3.53	2.65	1.74	0.84	0.36	0.71	1.14	a8 V	2.16	1160
8	4 17 48.6	+58 17 29	16.46		2.69	1.69	0.81	0.33	0.65	1.10	a4 V	2.33	3210
9	4 17 48.8	+58 12 46	17.35			1.85	0.95	0.34	0.84	1.37			
10	4 17 48.9	+58 18 16	16.74	3.32	2.68	1.91	0.89	0.38	0.75	1.26	g1 IV	1.23	3410
11	4 17 49.1	+58 17 25	15.64	4.81:	3.99	2.82	1.25	0.49	1.07	1.78	g9.5 III	1.85	4100
12	4 17 49.2	+58 17 10	17.77			1.63	0.84:	0.42	0.51	0.93			
13	4 17 49.2	+58 14 39	16.95	3.59:	2.73	1.57	0.76	0.29	0.58	0.96	a2 V:	2.34	4830
14	4 17 49.5	+58 20 21	17.73		2.93:	2.13:	0.96:	0.40	0.87:	1.33	g5.5 V	1.49	1710
15	4 17 49.6	+58 22 42	16.68	3.44	2.84	1.95	0.98	0.40	0.81	1.28			
16	4 17 50.1	+58 22 00	17.52			1.92	0.95	0.36	0.72	1.12			
17	4 17 50.3	+58 17 35	15.76	3.44	2.44	1.43	0.73	0.26	0.56	0.92	a2 III	2.06	4780
18	4 17 50.8	+58 13 52	17.78			1.88	0.86	0.35	0.75	1.21	g1 IV	1.19	5580
19	4 17 51.0	+58 22 31	17.80			1.94:	1.08:	0.39:	0.88	1.38			
20	4 17 51.5	+58 21 48	15.98	3.72	3.07	2.16	0.99	0.35	0.86	1.34	g4 IV	1.57	1950
21	4 17 52.2	+58 21 22	14.52	3.72	3.10	2.18	0.95	0.40	0.83	1.25	g8 IV	1.09	1160
22	4 17 52.3	+58 23 31	16.88			2.62	1.28	0.47	0.99	1.70	a5:	4.20	
23	4 17 52.7	+58 11 02	17.54			2.29:	1.02	0.40	0.93	1.38	g6 IV	1.63	3780
24	4 17 52.9	+58 16 10	17.96			1.94:	0.89	0.36	0.79	1.24	g4 V	1.20	2390
25	4 17 53.3	+58 19 37	15.79	3.45	2.72	1.97	0.94	0.34	0.78	1.27	f7 IV	1.76	1910
26	4 17 53.4	+58 22 57	17.98			2.18:	1.12:	0.36	0.98:	1.46:	f2 V-III	2.80	2730
27	4 17 53.7	+58 13 14	17.63		3.25::	2.45	1.05	0.43	0.93	1.44			
28	4 17 54.1	+58 25 07	15.61	3.28	2.61	1.78	0.89	0.39	0.64	1.13	f1 V:	1.85	1520
29	4 17 54.1	+58 15 17	18.25			1.75:	0.91	0.38	0.61	1.08	a1 V:	2.73	8010
30	4 17 54.8	+58 19 32	15.77	4.59:	3.79	2.72	1.25	0.50	1.06	1.78	g9 IV	2.20	1240
31	4 17 55.2	+58 08 18	14.98	3.39	2.55	1.53	0.69	0.26	0.63	0.94	a4 V	1.97	1910
32	4 17 55.2	+58 14 59	18.15			2.15:	0.98	0.38	0.93	1.47	g5.5 V	1.62	1950
33	4 17 55.6	+58 12 47	16.53	3.73:	2.68	1.67	0.83	0.30	0.69	1.12	a3 V-III	2.43	3470
34	4 17 56.0	+58 12 59	16.96		2.82	2.01	0.98	0.37	0.87	1.37	f7 III	1.86	4170
35	4 17 56.1	+58 21 14	15.06	4.52	3.77	2.62	1.16	0.43	1.02	1.62	g9.5 III	1.44	3790
36	4 17 56.2	+58 25 20	17.87:			1.83:	0.95:	0.48:	0.76:	1.23:			
37	4 17 56.7	+58 18 09	18.27			1.95:	0.97:	0.40	0.84	1.35	a0.5	3.39	
38	4 17 56.8	+58 18 24	17.73			2.93:	1.51	0.52	1.63	3.45			
39	4 17 56.9	+58 10 23	17.00			2.77	1.09	0.58	1.09	1.57	k3.7 V	1.42	570
40	4 17 57.0	+58 07 40	17.00		2.69:	1.90	1.00:	0.31	0.87	1.43			
41	4 17 57.2	+58 18 32	17.11		2.85	1.99	0.98	0.41	0.80	1.29	f0 V-IV	2.52	2400
42	4 17 57.6	+58 07 36	17.51			1.71:	0.83	0.31	0.73	1.23:	f2	1.71	
43	4 17 57.6	+58 11 48	16.60	3.93:	2.83	1.71	0.83	0.31	0.70	1.13	a3 IV:	2.59	4190
44	4 17 57.7	+58 10 42	17.33		2.67:	1.69	0.83	0.30	0.70	1.05	a5 V-III	2.29	4460
45	4 17 57.8	+58 10 06	15.20	5.03:	4.08	2.85	1.25	0.47	1.13	1.82	k0 III:	1.94	3250
46	4 17 57.9	+58 24 09	17.55			2.17:	1.02:	0.37	0.95	1.46	g0 V-IV	1.99	1780
47	4 17 57.9	+58 17 43	17.04	3.68:	2.68	1.67	0.82	0.34	0.69	1.09	a1.5 V	2.57	4710
48	4 17 58.1	+58 21 55	17.47		2.81:	1.77	0.95	0.30	0.80	1.20	a0 V-III	3.09	5460
49	4 17 58.2	+58 19 01	17.94			2.03:	1.07:	0.41:	0.79:	1.29	a1 V	3.44	5020
50	4 17 58.4	+58 17 00	16.89	3.38:	2.62	1.71	0.86	0.34	0.70	1.11	a9 V	2.04	2820
51	4 17 58.8	+58 13 07	16.08	4.68:	3.90	2.75	1.25	0.46	1.14	1.83	g8 III	2.05	4430
52	4 17 59.0	+58 15 56	17.42			2.81:	1.29	0.51	1.13	1.89	g8 IV	2.55	2260
53	4 17 59.1	+58 20 12	15.62	3.29	2.59	1.81	0.89	0.35	0.77	1.22	f6 IV	1.61	1940
54	4 17 59.2	+58 14 41	17.36		2.75	1.80	0.85	0.34	0.69	1.12	a6 V	2.36	3980
55	4 17 59.2	+58 25 22	17.73			1.99:	0.92:	0.38:	0.86:	1.30	g1.5 V	1.46	2220
56	4 17 59.5	+58 10 50	17.36		2.79:	2.01	0.97	0.37	0.94	1.42	f9.5 V	1.79	1860
57	4 17 59.9	+58 20 15	18.08			2.08:	0.95:	0.36	0.85:	1.39	g4 V-III	1.49	2210
58	4 18 00.0	+58 11 41	16.99			2.42	1.10	0.44	1.02	1.58	g8 V	1.97	800
59	4 18 00.1	+58 14 53	15.88		4.21	2.97	1.31	0.50	1.17	1.91	k0 III	2.13	4070
60	4 18 00.1	+58 10 14	18.00			2.05:	0.99	0.32	0.94	1.42			
61	4 18 00.5	+58 17 03	17.66		2.75:	1.73:	0.85	0.34	0.71	1.16:	a1.5 V	2.71	5880

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	$U-V$ mag	$P-V$ mag	$X-V$ mag	$Y-V$ mag	$Z-V$ mag	$V-S$ mag	$V-I$ mag	Photom. sp. type	A_V mag	d pc
62	4 18 00.6	+58 07 56	16.59		2.61:	1.81	0.87	0.31	0.80	1.22	f1 V-III	2.03	2190
63	4 18 00.7	+58 10 32	15.97		3.89	2.79	1.26	0.45	1.15	1.86	g6 III	2.32	3590
64	4 18 01.1	+58 09 25	17.76		2.62:	1.74	0.89	0.31	0.73	1.10			
65	4 18 01.2	+58 21 06	17.70		2.66:	1.72:	0.83:	0.23	0.77:	1.17	a7 V-III	2.24	4490
66	4 18 01.2	+58 16 22	15.52	4.22	3.56	2.40	0.99	0.47	0.93	1.42	k0.7 IV	0.95	1970
67	4 18 01.2	+58 13 28	17.85			1.88	0.89	0.33	0.77	1.23			
68	4 18 01.3	+58 18 45	18.44			2.22:	1.07	0.42	0.96	1.50			
69	4 18 01.4	+58 22 50	17.08			2.90	1.19	0.54	1.13	1.73	k3.2 V	1.90	500
70	4 18 01.7	+58 07 32	16.86		2.74:	2.01	0.96	0.37	0.90	1.39	f9.5 V	1.73	1520
71	4 18 01.8	+58 20 18	16.68			2.88	1.10	0.64	1.05	1.60	k4.5 V	1.27	470
72	4 18 02.1	+58 17 39	17.44		2.79:	1.99	0.97	0.37	0.85	1.35	f3 IV	2.22	3710
73	4 18 02.2	+58 17 43	17.34		2.76	1.89	0.93	0.36	0.79	1.26	f0 V-IV	2.34	2890
74	4 18 02.5	+58 19 28	17.68			2.93:	1.12	0.69	1.14	1.71	k5.5 V	1.12	680
75	4 18 02.6	+58 23 50	14.66	3.43	2.64	1.81	0.89	0.30	0.78	1.19	f1 V	2.03	900
76	4 18 02.7	+58 23 34	17.85		2.76::	1.87:	0.93:	0.28:	0.81:	1.19:	a9 V-III	2.38	3760
77	4 18 02.7	+58 08 08	17.23		2.57:	1.80	0.87	0.31	0.83	1.24	f2 V	1.94	2860
78	4 18 02.8	+58 22 54	15.25	5.33:	4.40	3.15	1.35	0.52	1.20	1.95	k0.5 III	2.30	2820
79	4 18 02.8	+58 18 37	18.14		2.87::	1.99	0.97	0.41	0.79	1.27	f0	2.49	
80	4 18 02.9	+58 19 36	17.75			2.04	0.82	0.35	0.89	1.36	g9.5 V	0.90	1630
81	4 18 03.3	+58 21 03	15.32	3.01	2.19	1.25	0.65	0.23	0.51	0.74	a0.5 V	1.73	3540
82	4 18 03.6	+58 11 56	16.63		3.86:	2.87	1.30	0.46	1.20	1.95	g4 III	2.69	3990
83	4 18 03.7	+58 06 42	15.22	3.33	2.69	1.91	0.91	0.34	0.84	1.28	f9.5 IV	1.44	1590
84	4 18 04.2	+58 05 49	16.59			2.69	1.21	0.49	1.02	1.69	g9 IV	2.06	1940
85	4 18 04.2	+58 06 08	17.67			2.27:	1.06:	0.45	0.82:	1.37			
86	4 18 04.4	+58 13 20	14.91	5.14:	4.25	2.97	1.29	0.47	1.15	1.83	k0.5 III	1.99	2780
87	4 18 04.4	+58 13 32	18.30			2.00:	0.96	0.37	0.85	1.36	f9.5	1.69	
88	4 18 04.5	+58 26 47	15.44	4.46	3.73	2.54	1.14	0.53	0.94	1.51	k0.7 IV:	1.30	1610
89	4 18 04.5	+58 20 11	13.93	3.61	3.04	2.08	0.88	0.36	0.82	1.17	g9.5 IV	0.65	1090
90	4 18 04.6	+58 10 18	18.15			1.98:	0.99:	0.33	0.92	1.42	f2 V-III	2.40	3550
91	4 18 04.6	+58 14 54	17.59		2.72:	1.76	0.86	0.33	0.75	1.17			
92	4 18 05.0	+58 21 10	17.85	3.31::	2.63:	1.75	0.89:	0.31	0.73	1.17	f2 III::	1.66	7910
93	4 18 05.1	+58 13 12	18.03			3.18:	1.24	0.71	1.33	2.10	m0 V	1.22	399
94	4 18 05.6	+58 18 12	16.92	3.75:	2.84	2.00	1.01	0.39	0.84	1.36	f2 IV	2.36	2830
95	4 18 05.7	+58 06 52	16.71		2.64	1.83	0.88	0.32	0.80	1.23	f5 III	1.67	4250
96	4 18 05.9	+58 16 05	16.24	3.70	2.93	2.10	1.00	0.36	0.90	1.45	f9 IV	1.96	2020
97	4 18 06.3	+58 17 27	15.40	4.64:	3.78	2.70	1.22	0.45	1.09	1.78			
98	4 18 06.3	+58 12 11	16.54:	3.82:	2.99	2.13	1.06	0.42	0.86	1.34	f3 IV	2.53	2130
99	4 18 06.5	+58 05 58	15.99			3.05	1.10	0.65	1.16	1.76	k5.5 V	1.23	296
100	4 18 06.7	+58 16 03	17.89			2.72:	1.29	0.50	1.10	1.83	g3 IV	2.87	2620
101	4 18 06.8	+58 16 14	17.68		2.63:	1.61	0.75	0.31	0.54	0.89	a4 V:	2.07	6360
102	4 18 06.9	+58 14 08	16.99	3.66:	2.65	1.70	0.79	0.28	0.67	1.05	a8 III	1.97	6000
103	4 18 07.0	+58 17 03	15.93	3.35	2.63	1.86	0.92	0.35	0.78	1.22	f6 IV	1.69	2160
104	4 18 07.2	+58 25 24	17.64		2.64:	1.80	0.84:	0.38	0.71	1.12			
105	4 18 07.3	+58 09 50	17.05			3.39:	1.46	0.56	1.29	2.13	k1 III	2.65	5500
106	4 18 07.5	+58 21 52	16.05	3.60:	2.67:	1.67:	0.85:	0.29:	0.61:	1.17:			
107	4 18 08.0	+58 22 33	16.09	3.33	2.61	1.84	0.89	0.34	0.78	1.16	f6 IV	1.64	2370
108	4 18 08.2	+58 17 14	16.88	3.61:	2.75	1.88	0.92	0.34	0.81	1.32	f0 V	2.32	2350
109	4 18 08.3	+58 12 02	16.02	4.30:	3.60	2.51	1.12	0.43	1.02	1.59	g9.5 IV	1.68	1770
110	4 18 08.4	+58 22 50	17.99		2.69::	1.78	0.90:	0.31	0.85:	1.17	a9	2.28	
111	4 18 08.5	+58 27 08	14.20	3.02	2.38	1.64	0.77	0.34	0.60	0.95	f6 IV	1.14	1250
112	4 18 08.5	+58 11 30	17.63			1.77	0.86	0.33	0.63	1.10			
113	4 18 08.6	+58 22 47	17.32	3.65:	2.64	1.83	0.91	0.31	0.77	1.15			
114	4 18 08.6	+58 23 04	18.05		2.47:	1.79:	0.75:	0.27:	0.86:	1.21	g1 V	1.03	3250
115	4 18 08.8	+58 08 15	17.06		2.55:	1.52	0.75	0.23	0.61	1.03	a3 V-III	2.12	5110
116	4 18 08.9	+58 12 47	18.07			1.94:	0.93	0.33	0.87	1.31	f9 V-III	1.62	2870
117	4 18 08.9	+58 24 29	14.93	3.48	2.68	1.86	0.92	0.33	0.77	1.23	f2 IV	1.98	1350
118	4 18 09.0	+58 07 49	16.91			2.53	1.13	0.42	1.04	1.65	g4 III	1.96	6370
119	4 18 09.3	+58 26 47	17.22		2.69:	1.98:	0.99:	0.44:	0.76	1.20	f6 V:	1.86	2170
120	4 18 09.4	+58 11 36	17.49		2.89:	2.06	0.97	0.37	0.88	1.38	g4 V-III	1.54	1640
121	4 18 09.6	+58 26 56	17.27	3.34:	2.51	1.76	0.89	0.41	0.69	1.12			
122	4 18 09.6	+58 27 17	15.92	4.41:	3.72:	2.67	1.17	0.53	0.99	1.61	k1.5 V	1.88	360
123	4 18 09.8	+58 26 39	16.78	3.29	2.62	1.86	0.91	0.41	0.69	1.13	f9 IV	1.34	3450
124	4 18 10.1	+58 27 27	17.05	3.33:	2.62:	1.79	0.91	0.44	0.68	1.10	f1 V:	1.95	2830
125	4 18 10.3	+58 14 40	17.33	3.58	2.69	1.84	0.92	0.35	0.77	1.26	f0 V	2.24	3010

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U−V mag	P−V mag	X−V mag	Y−V mag	Z−V mag	V−S mag	V−I mag	Photom. sp. type	A_V mag	d pc
126	4 18 10.4	+58 26 51	14.47	5.05	4.25	2.96	1.25	0.55	1.05	1.70	k1.5 III	1.52	2890
127	4 18 10.5	+58 13 43	17.85	3.29		1.93	0.92	0.34	0.83	1.28	f8 V	1.59	2830
128	4 18 10.5	+58 06 07	17.90			1.86:	0.86	0.31	0.82	1.25:	g0 V	1.32	2870
129	4 18 10.8	+58 18 13	16.19	3.56	2.66	1.93	0.94	0.36	0.82	1.29	f4 IV	2.01	2240
130	4 18 11.1	+58 24 31	17.61			2.42:	0.95:	0.38:	0.93	1.48	k0.5 III	0.69	
131	4 18 11.1	+58 11 08	17.55			1.99	1.02	0.33	0.94	1.45	f2 V-III	2.45	2630
132	4 18 11.4	+58 06 57	18.03			2.29:	1.06	0.38	1.00	1.49:	g0 V-IV	2.20	2020
133	4 18 11.4	+58 05 18	17.85			1.97:	1.06:	0.41:	0.77:	1.27	a0.5 V	3.36	5350
134	4 18 11.8	+58 27 08	18.00:		2.49::	1.82:	0.94:	0.35:	0.71:	1.11:			
135	4 18 11.9	+58 19 40	15.38	3.66	2.95	2.08	0.96	0.37	0.87	1.30	g1.5 IV	1.64	1480
136	4 18 12.1	+58 07 47	17.13		2.52:	1.60	0.78	0.27	0.65	1.01	a7 V-III	1.96	3920
137	4 18 12.2	+58 23 47	16.98			2.99	1.30	0.47	1.22	1.93	g8.5 III	2.40	5770
138	4 18 12.6	+58 16 34	16.18	4.48	3.75	2.69	1.22	0.44	1.09	1.72	g6 III	2.04	4520
139	4 18 12.7	+58 21 09	17.95	4.28		2.56:	1.17	0.51	1.05	1.62	g9 V	2.14	1050
140	4 18 13.0	+58 27 17	18.35:			1.80:	0.99:	0.34:	0.88:	1.29:			
141	4 18 13.0	+58 22 42	15.22	3.64	2.88	2.02	0.97	0.32	0.94	1.43	g0 IV	1.75	1360
142	4 18 13.2	+58 17 33	17.13	4.20	3.41:	2.43	1.05	0.46	0.98	1.51	g9 IV	1.56	3120
143	4 18 13.2	+58 22 13	13.14	2.99	2.39	1.68	0.75	0.28	0.69	0.96	f9 IV	0.91	790
144	4 18 13.4	+58 19 43	15.33	3.56	2.62	1.60	0.76	0.29	0.67	1.03	a4 IV	2.15	2610
145	4 18 13.4	+58 08 03	17.13			3.14:	1.21	0.67	1.31	1.98	k6 V	1.43	415
146	4 18 13.4	+58 13 51	16.00	4.60	3.69	2.63	1.21	0.43	1.11	1.74	g5.5 III:	2.11	3990
147	4 18 13.4	+58 12 13	17.39	3.63	2.69	1.72	0.83	0.30	0.78	1.21	a7 IV	2.22	5170
148	4 18 13.5	+58 17 23	17.35	3.51	2.66	1.65	0.78	0.29	0.67	1.06	a5 V	2.13	4840
149	4 18 13.6	+58 26 59	17.09	3.53:	2.64	1.77	0.86	0.42	0.62	1.03	a9 V:	2.09	3010
150	4 18 13.6	+58 24 56	15.28	4.61:	3.80	2.68	1.22	0.46	1.03	1.62			
151	4 18 13.8	+58 16 57	17.01	3.50	2.64	1.81	0.88	0.32	0.78	1.24	f0 V	2.14	2720
152	4 18 13.9	+58 18 54	18.22	3.57		2.18:	1.00	0.39	0.92	1.38:	g1.5 V-IV	1.78	2400
153	4 18 14.0	+58 07 31	16.68		2.88:	2.03	0.94	0.32	0.91	1.39	g5 V-III	1.45	1110
154	4 18 14.1	+58 15 01	17.90	3.86		1.75	0.89	0.34	0.74	1.21	a0.5 V	2.90	6750
155	4 18 14.2	+58 22 40	14.89	4.61	3.58	2.65	1.26	0.43	1.13	1.85	f7 III	3.23	850
156	4 18 14.4	+58 27 48	13.21	6.61	5.56	3.96	1.56	0.78	1.34	2.31	k5 III	1.96	1620
157	4 18 14.4	+58 17 51	18.23	3.62		1.91:	0.97	0.39:	0.85	1.38	f2 V	2.23	3990
158	4 18 14.5	+58 09 20	18.22			1.85:	0.96	0.30	0.95	1.44	f2 V-III:	2.28	3860
159	4 18 14.7	+58 13 10	16.96	4.14	3.25	2.09	1.05	0.44	1.13	2.05	a7 IV:	3.18	2730
160	4 18 14.8	+58 05 59	16.88		2.53:	1.69	0.83	0.28	0.73	1.18	a9 V-III	1.99	2870
161	4 18 14.9	+58 10 15	18.22	3.66		2.26:	1.00	0.33	1.01	1.43	g3 V-III:	1.83	2150
162	4 18 15.3	+58 06 16	17.78			1.55	0.75	0.25	0.60	1.01	a3 V-III	2.11	7130
163	4 18 15.5	+58 06 12	18.25			1.93:	0.88:	0.33	0.90	1.39:	g0 V	1.55	3010
164	4 18 15.6	+58 08 31	15.70	2.77	2.05	1.27	0.64	0.23	0.57	0.80	a9 V	1.06	2560
165	4 18 15.9	+58 13 16	18.04	4.09		2.43	1.08	0.45	0.99	1.51	g9 V	1.83	1270
166	4 18 15.9	+58 27 48	16.76	3.31:	2.54	1.73	0.99	0.42	0.66	1.06			
167	4 18 16.1	+58 12 30	16.88	3.72	2.72	1.70	0.81	0.28	0.70	1.11	a4 V-III	2.37	3820
168	4 18 16.1	+58 13 59	16.11	3.37	2.62	1.86	0.90	0.33	0.82	1.24	f6 IV	1.70	2330
169	4 18 16.2	+58 05 28	16.71		2.65	1.87	0.89	0.30	0.79	1.25	f2 IV	1.98	3060
170	4 18 16.5	+58 09 51	16.98	3.43:	2.49	1.45	0.70	0.22	0.63	0.93	a3 V-III	2.00	5200
171	4 18 16.5	+58 12 54	16.64	3.71	2.92	2.03	1.00	0.35	0.92	1.40	f1 V	2.54	1780
172	4 18 16.8	+58 06 27	17.87			1.79:	0.88	0.29	0.81	1.31:	f4 V-III	1.77	3580
173	4 18 16.9	+58 07 36	17.81		2.53:	1.87:	0.92	0.31	0.86	1.35	f5 V-III	1.82	3150
174	4 18 17.0	+58 16 16	16.57	5.12	4.26::	3.06	1.36	0.50	1.17	1.88	g9 III	2.43	4750
175	4 18 17.2	+58 05 06	17.79			2.05:	1.01	0.34	0.86	1.38			
176	4 18 17.2	+58 16 34	17.73	3.55::	2.72:	1.90	0.96	0.37	0.85	1.34	f2 V	2.21	3190
177	4 18 17.3	+58 21 38	15.35	4.47	3.61	2.59	1.17	0.43	1.06	1.68			
178	4 18 17.4	+58 11 58	18.07	3.59		2.00	0.98	0.34:	0.88	1.32	f4 V	2.18	3240
179	4 18 17.4	+58 18 26	17.44	3.58	2.75	1.98	0.97	0.37	0.85	1.31	f4 IV	2.11	3810
180	4 18 17.5	+58 10 58	17.50	3.64	2.70:	1.98	0.99	0.34	0.89	1.38			
181	4 18 17.5	+58 20 23	17.60	3.58	2.62	1.65	0.74	0.28	0.63	0.95	a5 V-III	2.09	5520
182	4 18 17.6	+58 21 49	17.00	3.58	2.80	1.96	0.93	0.38	0.81	1.30	f3 IV	2.12	3190
183	4 18 17.6	+58 09 29	16.22	3.89	2.70	1.77	0.88	0.29	0.81	1.25			
184	4 18 17.6	+58 16 05	17.79	3.71	2.67:	1.78	0.88	0.31	0.77	1.22	f0 III	2.04	7410
185	4 18 17.6	+58 17 19	18.03	3.60	2.55:	1.89	1.00	0.39	0.81	1.35	b9::	3.22	
186	4 18 17.6	+58 25 50	17.20		3.00:	2.17	1.00:	0.42	0.83	1.26	g1 IV	1.79	3250
187	4 18 17.7	+58 19 32	16.08	4.97	4.13:	2.92	1.26	0.49	1.15	1.83	k0 III	2.00	4740
188	4 18 17.7	+58 23 19	14.63	3.30	2.52	1.63	0.77	0.27	0.69	0.97	a9 V	1.83	1100
189	4 18 17.7	+58 16 24	17.39	4.50		2.59	1.09	0.50	1.06	1.60	k2 V:	1.76	700

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U−V mag	P−V mag	X−V mag	Y−V mag	Z−V mag	V−S mag	V−I mag	Photom. sp. type	A_V mag	d pc
190	4 18 17.9	+58 11 40	17.78	3.73	2.75:	1.89	0.89	0.29	0.79	1.25	f0 IV	2.29	4770
191	4 18 17.9	+58 20 40	16.02	3.56	2.61	1.58	0.74	0.28	0.63	0.95	a3 IV	2.18	3880
192	4 18 17.9	+58 22 18	17.18	3.47:	2.68	1.85	0.88	0.34	0.78	1.27	f1 V	2.10	2790
193	4 18 18.0	+58 10 19	17.71	3.62	2.83::	2.12:	1.03	0.32	1.00	1.47	f7 V	2.14	2230
194	4 18 18.0	+58 24 35	17.09	3.65:	2.88:	2.15	0.97:	0.42	0.85	1.33	g7 V:	1.34	1220
195	4 18 18.1	+58 15 22	18.37	3.57		1.90:	0.96	0.37	0.78	1.23			
196	4 18 18.1	+58 07 19	15.37	4.47:	3.73	2.62	1.19	0.42	1.07	1.70	g6 III	1.98	3200
197	4 18 18.1	+58 11 25	17.79	3.68		1.98	0.97	0.32	0.84	1.29	f1 V-III	2.39	3240
198	4 18 18.2	+58 08 18	17.25		2.73:	1.97	0.95	0.31	0.95	1.37			
199	4 18 18.2	+58 14 23	17.39	4.31		2.57	1.10	0.53	1.08	1.61	k2 V	1.67	730
200	4 18 18.3	+58 09 09	17.59		2.78:	1.71	0.88	0.28	0.75	1.13	a3 V-III	2.61	5200
201	4 18 18.4	+58 10 35	17.23	3.59	2.82:	2.03	0.98	0.33	0.93	1.42	f6 V-IV	2.10	1960
202	4 18 18.5	+58 26 00	15.91	4.69:	3.95	2.80	1.19	0.49	1.05	1.68	k0.5 IV	1.82	1580
203	4 18 18.5	+58 19 07	18.30	4.06:		2.24:	1.09:	0.45	0.97	1.54	f1 V-III	3.01	3090
204	4 18 18.6	+58 19 54	15.91	4.49::	4.06	2.86	1.05	0.63	1.11	1.63	k5 V:	1.05	340
205	4 18 18.7	+58 11 02	18.33	3.44		2.07:	1.00	0.36	0.89	1.39:			
206	4 18 19.1	+58 08 36	15.91			2.91	1.24	0.48	1.19	1.86	g9.5 III	2.07	4200
207	4 18 19.3	+58 07 43	17.16		2.61:	1.66	0.81	0.28	0.70	1.09	a7 V-III	2.12	3690
208	4 18 19.4	+58 26 19	16.96		3.17:	2.34	1.06:	0.43	0.91	1.44	g1.5 III	1.81	6780
209	4 18 19.6	+58 07 02	17.56			2.05:	0.95	0.33	0.88	1.37:	f9 V-IV	1.78	2120
210	4 18 19.6	+58 23 01	14.61	3.10	2.18	1.23	0.62	0.20	0.55	0.75	a1.5 III	1.67	3530
211	4 18 20.1	+58 14 32	17.23	3.67:	2.69	1.76	0.84	0.32	0.71	1.09	a7 V	2.29	3530
212	4 18 20.1	+58 16 03	17.57	3.48	2.71:	1.87	0.96	0.38	0.85	1.30	f2 V	2.13	3070
213	4 18 20.3	+58 06 41	16.30		2.52	1.49	0.75	0.24	0.64	1.01	a2 V-III	2.20	3810
214	4 18 20.5	+58 23 31	18.20			2.11:	0.91:	0.35:	0.88:	1.32:	g6 V-III	1.41	2110
215	4 18 20.7	+58 10 15	16.22	4.24	3.58	2.44	1.06	0.46	1.02	1.53	k1.2 V	1.65	476
216	4 18 20.8	+58 21 17	16.96	3.32	2.43	1.37	0.66	0.26	0.51	0.79	a1.5 V	1.96	6040
217	4 18 20.8	+58 17 55	15.82	3.53	2.54	1.50	0.76	0.27	0.65	1.06	a1.5 V-III	2.29	3060
218	4 18 20.8	+58 11 48	17.89	4.14		2.42	1.08	0.41	1.01	1.46	g6 IV	1.93	3840
219	4 18 20.9	+58 15 34	17.79	3.67	2.74:	1.85	0.96	0.35	0.80	1.25	a9 V	2.41	3600
220	4 18 20.9	+58 20 44	17.19	3.53	2.58	1.57	0.75	0.28	0.64	0.98	a4 V-III	2.09	4990
221	4 18 21.1	+58 26 02	18.09		2.56:	1.75:	0.76:	0.26:	0.73:	1.16			
222	4 18 21.3	+58 08 24	15.66		3.87	2.73	1.26	0.43	1.15	1.84	g6 III	2.26	3210
223	4 18 21.4	+58 18 53	16.34	3.86:	3.12	2.23	1.04	0.40	0.95	1.47	g2 IV	1.92	2010
224	4 18 21.4	+58 13 38	16.48	3.64	2.67	1.61	0.78	0.28	0.64	1.00	a3 IV	2.29	4550
225	4 18 21.5	+58 24 20	17.79	3.41::	2.52:	1.82:	0.90:	0.31:	0.77:	1.16:			
226	4 18 21.6	+58 13 25	16.76	3.77:	2.78	1.72	0.85	0.30	0.76	1.17	a3 IV	2.57	4550
227	4 18 21.7	+58 18 59	18.22:		2.67::	1.83	0.89	0.29	0.82	1.32	f1 V-III	2.14	4430
228	4 18 21.9	+58 16 44	15.76	3.68	2.66	1.70	0.82	0.29	0.73	1.14	a8 III	2.06	3270
229	4 18 21.9	+58 16 01	17.78		2.64:	1.73	0.88	0.32	0.77	1.19			
230	4 18 22.0	+58 15 03	17.88		2.68:	1.76	0.86	0.31	0.75	1.21	a8 V-III	2.26	4460
231	4 18 22.4	+58 04 50	17.54			2.05:	0.99	0.37	0.89	1.33:	f6 V-III	2.07	2290
232	4 18 22.5	+58 15 59	16.91	3.79:	2.95	2.15	1.04	0.37	0.97	1.52	f4 V	2.51	1630
233	4 18 22.7	+58 15 05	16.06	3.75	2.74	1.73	0.84	0.31	0.71	1.11	a4 V	2.44	2540
234	4 18 22.9	+58 18 45	14.20	4.95	4.11	2.88	1.24	0.49	1.10	1.73	k0.5 III	1.75	2250
235	4 18 23.0	+58 23 12	17.40			2.43	1.03	0.43	1.00	1.42	k0.7 V	1.57	900
236	4 18 23.0	+58 14 52	17.35	3.63	2.74	1.83	0.86	0.34	0.74	1.16	a8 V	2.30	3430
237	4 18 23.0	+58 08 25	17.06		2.85	2.00	0.99	0.31	0.97	1.48	f1 V-III	2.56	2140
238	4 18 23.4	+58 08 58	16.56	3.72:	2.89	2.05	0.99	0.32	0.92	1.39	f2 V	2.47	1650
239	4 18 23.7	+58 12 04	17.26	3.80	3.04:	2.20	1.03	0.37	0.94	1.43	f9.5 IV	2.08	3020
240	4 18 23.7	+58 28 38	17.90:			1.86:	0.94:	0.49:	0.65:	1.11:			
241	4 18 24.0	+58 19 12	17.31	3.32	2.63	1.89	0.92	0.34	0.82	1.26	f6 V	1.73	2420
242	4 18 24.0	+58 16 48	16.75	3.53	2.55	1.55	0.76	0.27	0.63	1.01	a3 V-IV	2.15	4360
243	4 18 24.0	+58 24 48	17.99		2.77:	1.95:	0.97:	0.37	0.77:	1.21	f1 V-III	2.30	3710
244	4 18 24.1	+58 15 58	18.10	4.32		2.44:	1.20	0.43	1.08	1.78	f2 V-III:	3.33	2270
245	4 18 24.2	+58 16 39	17.42	3.54	2.65	1.67	0.82	0.32	0.69	1.08	a6 V	2.15	4490
246	4 18 24.3	+58 24 13	17.74			2.94:	1.28:	0.50:	1.12	1.80	k0 III	2.01	
247	4 18 24.9	+58 23 39	17.61	3.21:	2.49:	1.80	0.88:	0.28	0.85:	1.20	f5 V	1.63	3140
248	4 18 24.9	+58 15 02	14.76	5.20	4.43	3.08	1.33	0.51	1.16	1.88	k1.2 III	1.95	2670
249	4 18 25.1	+58 14 51	16.82	3.75	2.68	1.68	0.82	0.30	0.71	1.13	a3 V-III	2.45	3920
250	4 18 25.2	+58 19 20	18.02	3.56	2.92::	1.64	0.88	0.35	0.61	1.07	a1.5 V::	2.52	7580
251	4 18 25.3	+58 24 39	14.39	4.97	4.14	2.93	1.26	0.48	1.13	1.79	k0 III	2.00	2180
252	4 18 25.7	+58 23 25	16.82	3.28:	2.54	1.73	0.86	0.31	0.80	1.14	f1 V	1.87	2630
253	4 18 25.8	+58 09 22	16.20		3.88:	2.74	1.20	0.44	1.14	1.77	g8 III	1.99	4820

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
254	4 18 25.8	+58 10 03	17.21	3.56	2.81	1.76	0.85	0.29	0.74	1.17	a7 V-IV:	2.28	3510
255	4 18 25.9	+58 11 44	17.60	3.70	2.77:	1.79	0.87	0.30	0.79	1.22	a7 IV	2.34	5410
256	4 18 26.2	+58 13 40	17.74	3.69	2.58:	1.75	0.88	0.31	0.74	1.18	b9 V-III:	3.11	7010
257	4 18 26.2	+58 15 01	16.14	3.84	2.80	1.78	0.85	0.30	0.71	1.13	a4 V	2.55	2500
258	4 18 26.3	+58 25 21	18.08:		2.69:	1.94:	0.80:	0.27:	0.82:	1.28:	g2.5 III	0.77	
259	4 18 26.5	+58 26 31	18.01:			1.75:	0.96:	0.33:	0.71:	1.13:			
260	4 18 26.6	+58 20 45	16.33	3.57:	2.58	1.51	0.73	0.28	0.59	0.92	a3 IV	2.10	4640
261	4 18 26.6	+58 12 14	18.28	3.72		2.10:	0.98	0.31	0.98	1.45	f9 V:	2.02	2640
262	4 18 26.6	+58 24 24	16.90	3.43:	2.53	1.62	0.74	0.30	0.57	0.90	a6 V	1.92	3950
263	4 18 26.6	+58 05 36	14.84	3.30	2.53	1.72	0.83	0.28	0.74	1.13	f1 V	1.83	1080
264	4 18 26.9	+58 18 10	17.98	3.51	2.67:	1.96	0.94	0.35	0.85	1.32	f4 V	2.04	3320
265	4 18 27.0	+58 20 33	17.00	3.40	2.67	1.88	0.91	0.34	0.84	1.29	f6 IV	1.77	3410
266	4 18 27.0	+58 20 14	16.66	3.60	2.66	1.62	0.79	0.29	0.64	1.01	a4 V-IV	2.22	3690
267	4 18 27.0	+58 24 45	15.93		4.09:	2.91	1.23	0.51	1.14	1.84	k0.5 IV	2.10	1400
268	4 18 27.1	+58 18 34	18.10	3.46	2.58:	1.78	0.91	0.33	0.79	1.19	f1 V	2.05	4370
269	4 18 27.1	+58 10 04	14.12	3.36	2.54	1.56	0.73	0.26	0.60	0.93	a5 V	1.88	1220
270	4 18 27.2	+58 24 05	18.03		2.93::	2.15:	0.97:	0.40:	0.93:	1.35	g1.5 V	1.80	2190
271	4 18 27.4	+58 13 02	18.09			2.79:	1.23	0.51	1.12	1.79	k0.5 V	2.38	880
272	4 18 27.6	+58 16 31	17.23	3.89	3.23:	2.24	1.01	0.40	0.95	1.45	g6 IV	1.61	3300
273	4 18 27.6	+58 10 36	17.85	3.82		2.29	1.08	0.39	1.00	1.49	g0 V-IV	2.24	1830
274	4 18 27.7	+58 15 23	18.11	3.60		1.98	0.98	0.33	0.92	1.36	f4 V	2.20	3280
275	4 18 27.7	+58 16 48	16.33	3.54	2.60	1.60	0.77	0.29	0.64	0.98	a4 V	2.13	3300
276	4 18 27.8	+58 04 56	18.36			1.93:	0.95	0.34	0.90	1.38:	f3 V-III	2.18	3990
277	4 18 28.0	+58 18 20	17.39:		2.76	1.79	0.85	0.31	0.76	1.16	a6 V	2.43	3920
278	4 18 28.1	+58 14 42	16.94	3.76	2.86	2.04	1.02	0.35	0.93	1.44	f2 V	2.50	1940
279	4 18 28.2	+58 07 56	15.48	3.56	2.68	1.86	0.94	0.31	0.86	1.34	f1 V	2.22	1210
280	4 18 28.2	+58 16 03	17.60	3.51	2.57	1.66	0.83	0.30	0.73	1.14			
281	4 18 28.2	+58 22 02	18.24			2.16:	0.94	0.39	0.85	1.36:	g9 V	1.18	1870
282	4 18 28.3	+58 12 15	17.46		2.77:	1.76	0.82	0.32	0.73	1.12	a5 V-III	2.40	4470
283	4 18 28.5	+58 03 36	16.17		2.63	1.85	0.93	0.34	0.79	1.30	f2 V	2.02	1690
284	4 18 28.6	+58 03 50	18.08			1.71:	0.82:	0.23:	0.76:	1.24:	f4 V-III	1.50	4460
285	4 18 28.7	+58 28 28	18.16:			2.10:	0.97:	0.58:	0.76:	1.27:			
286	4 18 28.9	+58 13 39	13.22	3.58	3.05	2.02	0.82	0.35	0.80	1.09	g9 III	0.14	2920
287	4 18 28.9	+58 16 55	16.62	3.58	2.65	1.62	0.77	0.29	0.64	1.00	a4 V-III	2.19	3680
288	4 18 29.2	+58 18 01	18.05		2.60:	1.84	0.94	0.33	0.77	1.20			
289	4 18 29.8	+58 07 12	17.77:			2.16:	1.03	0.38	0.98	1.46	g0 V-III	2.03	1940
290	4 18 30.0	+58 19 17	14.50	5.85:	4.82	3.46	1.49	0.60	1.32	2.18	k1.5 III	2.67	1720
291	4 18 30.1	+58 22 38	17.59	3.24::	2.51	1.78	0.90	0.38	0.75	1.18	f5 IV	1.60	4990
292	4 18 30.1	+58 07 54	17.76			2.08:	1.00	0.33	1.00	1.46:			
293	4 18 30.3	+58 20 39	17.76	3.57	2.60:	1.53	0.76	0.31	0.51	0.93	a1.5 V	2.29	7470
294	4 18 30.5	+58 27 30	16.08	3.52	2.89	2.09	0.95	0.38	0.83	1.22	g4 V	1.47	890
295	4 18 30.6	+58 10 21	16.73	3.84	2.93	1.83	0.89	0.31	0.75	1.21	a4 V-III	2.65	3130
296	4 18 30.6	+58 28 33	17.54			2.53:	1.05:	0.53:	0.96	1.42	k2.2 V	1.41	860
297	4 18 30.8	+58 14 53	16.05	3.63	2.76	1.80	0.88	0.31	0.76	1.19	a7 V	2.38	1970
298	4 18 31.0	+58 13 52	18.18			1.90	0.89	0.31	0.83	1.27			
299	4 18 31.1	+58 10 28	16.88			2.99	1.37	0.49	1.23	2.03	g5.5 III	2.78	4400
300	4 18 31.1	+58 13 59	18.15			1.85	0.97	0.31	0.82	1.29			
301	4 18 31.4	+58 11 30	17.38	3.83	2.81	1.74	0.86	0.31	0.68	1.10	a2 V-III	2.66	5040
302	4 18 31.5	+58 18 30	16.49	3.59	2.59	1.60	0.77	0.29	0.62	1.00	a4 V	2.15	3520
303	4 18 31.5	+58 12 58	14.78	3.53	2.82	1.98	0.90	0.34	0.84	1.23	g1.5 IV	1.43	1240
304	4 18 31.6	+58 16 02	15.49	3.31	2.58	1.81	0.88	0.32	0.78	1.19	f6 IV	1.60	1840
305	4 18 31.8	+58 03 33	16.84		2.73:	1.98	0.96	0.38	0.77	1.29	f8 IV	1.70	3080
306	4 18 31.9	+58 19 37	17.53	3.58	2.76	1.74	0.83	0.33	0.73	1.12	a6 V	2.27	4500
307	4 18 32.1	+58 12 21	17.79	3.50	2.76:	1.82	0.88	0.32	0.74	1.15	a9 V	2.19	3980
308	4 18 32.1	+58 11 23	15.54	4.61	3.79	2.67	1.22	0.44	1.08	1.73			
309	4 18 32.2	+58 14 11	16.22	3.88	2.85	1.84	0.91	0.31	0.81	1.28	a5 V-IV	2.63	2280
310	4 18 32.4	+58 05 54	17.69			1.80:	0.86	0.26	0.84	1.28	f9 V-III	1.35	2750
311	4 18 32.8	+58 18 07	14.42	3.36	2.58	1.83	0.89	0.33	0.81	1.23	f3 V	1.86	750
312	4 18 32.8	+58 13 39	17.43	3.76	2.73:	1.79	0.92	0.34	0.73	1.14	b9.5 V	3.09	5730
313	4 18 32.9	+58 17 10	16.09	3.54	2.61	1.59	0.77	0.29	0.67	1.02	a4 IV	2.13	3730
314	4 18 32.9	+58 23 53	15.35	4.94:	4.12	2.89	1.25	0.49	1.09	1.72	k0.7 III	1.69	3910
315	4 18 32.9	+58 14 21	15.78	3.66	2.61	1.48	0.77	0.25	0.64	1.04	a2 V-III:	2.33	2830
316	4 18 33.0	+58 25 05	16.45	4.33:	3.61:	2.64	1.17	0.46	1.07	1.67	g9.5 V	2.18	495
317	4 18 33.0	+58 21 02	17.84	3.69	2.78:	1.91	0.93	0.33	0.85	1.31	f4 III	1.95	6470

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
318	4 18 33.0	+58 27 16	17.94:		2.44::	1.80:	1.01:	0.39:	0.74:	1.13:			
319	4 18 33.1	+58 18 18	17.92		2.94:	1.93	0.95	0.38	0.77	1.23	a5 V	2.79	4630
320	4 18 33.2	+58 28 26	17.80		2.54:	1.69:	0.71:	0.34:	0.64:	1.04			
321	4 18 33.3	+58 22 17	16.91	3.47:	2.49	1.68	0.82	0.31	0.68	1.07	f3 III:	1.49	5390
322	4 18 33.4	+58 22 23	15.68	3.54	2.81	2.01	0.93	0.37	0.82	1.25	g0 IV	1.58	1820
323	4 18 33.6	+58 22 55	13.94	4.81	3.98	2.81	1.21	0.47	1.08	1.67	k0 III	1.74	2000
324	4 18 33.6	+58 17 09	18.19			1.98:	0.94	0.36	0.82	1.23	f8	1.69	
325	4 18 33.7	+58 18 30	14.60	6.34	5.36	3.78	1.51	0.66	1.32	2.17	k4 III	2.07	2670
326	4 18 33.7	+58 14 48	15.56	3.80	2.74	1.72	0.84	0.31	0.73	1.15	a4 IV	2.46	2510
327	4 18 33.9	+58 24 43	17.41	3.60::	2.64:	1.85	0.79:	0.31	0.76	1.18	f0 V-IV:	2.14	3270
328	4 18 34.1	+58 19 28	14.91	3.50	2.81	2.02	0.91	0.35	0.84	1.25	g1 IV	1.47	1320
329	4 18 34.2	+58 11 27	16.60	3.69	3.17	2.20	0.97	0.40	0.90	1.35	k0 V	1.18	800
330	4 18 34.3	+58 14 33	17.07	3.56	2.83	2.02	1.02	0.35	0.92	1.44	f7 IV	1.99	3090
331	4 18 34.4	+58 18 41	15.86	4.30	3.56:	2.43:	1.13	0.39	1.10	1.70	g6 III:	1.74	4480
332	4 18 34.4	+58 16 33	17.10	3.55:	2.65	1.64	0.78	0.29	0.65	1.01	a4 V-III	2.22	4520
333	4 18 34.4	+58 24 40	16.93	3.61:	2.78	1.96	0.95	0.37	0.78	1.21	f3 IV	2.13	3060
334	4 18 34.5	+58 15 28	15.38	4.62	3.79	2.70	1.21	0.44	1.07	1.71			
335	4 18 34.7	+58 15 51	18.15	3.29	2.67:	1.78	0.85	0.28	0.79	1.19	f4 III:	1.55	8970
336	4 18 34.7	+58 10 06	17.67	3.62	2.68:	2.06	0.98	0.34	0.90	1.36	f2 V:	2.32	2960
337	4 18 34.8	+58 19 20	16.26	3.50	2.76	1.96	0.93	0.35	0.85	1.28	f9 IV	1.65	2350
338	4 18 34.9	+58 19 45	15.22	4.57	3.75	2.65	1.18	0.44	1.05	1.66			
339	4 18 35.1	+58 18 27	11.80	5.16	4.38	2.97	1.15	0.52	1.05	1.55	k3.7 III	0.50	1500
340	4 18 35.3	+58 16 53	15.46	3.77	2.78	1.86	0.88	0.33	0.79	1.20	a8 V	2.46	1340
341	4 18 35.4	+58 15 22	18.02		2.75:	1.87	0.97	0.33	0.82	1.28	b8.5	3.46	
342	4 18 35.5	+58 11 17	17.49	3.68	2.82	1.85	0.87	0.33	0.72	1.10	a7 V	2.40	3790
343	4 18 35.5	+58 12 26	16.59	3.70	2.75	1.70	0.79	0.29	0.66	1.03	a4 V	2.35	3380
344	4 18 35.6	+58 19 02	18.12	3.60	2.75:	1.81	0.91	0.34	0.77	1.19	a9 V-IV	2.29	4430
345	4 18 35.7	+58 24 09	17.26		2.88:	2.05	0.97	0.35	0.91	1.37	f1 V-III	2.55	2350
346	4 18 35.7	+58 09 03	17.65			3.10:	1.31	0.46	1.33	2.16	m2 V-III::	0.48	283
347	4 18 36.1	+58 20 33	16.73	3.66	3.00	2.09	0.96	0.36	0.91	1.35	g4 IV	1.48	2860
348	4 18 36.2	+58 16 34	17.38	3.43:	2.63	1.67	0.52	0.32	0.69	1.04			
349	4 18 36.3	+58 09 02	17.77			2.46	1.09	0.37	1.12	1.64	g2.5 III	2.07	8800
350	4 18 36.4	+58 24 37	17.41		2.64:	1.65	0.74:	0.26	0.63	0.93	a5 V-III	2.11	5010
351	4 18 36.6	+58 25 36	16.80			2.98	1.34:	0.53	1.15	1.87	k0 IV	2.51	1730
352	4 18 36.6	+58 17 19	17.65	3.66	2.76	1.90	0.94	0.34	0.85	1.30	f0 V	2.39	3250
353	4 18 36.7	+58 16 54	16.28	3.62	2.59	1.60	0.77	0.28	0.64	1.01	a3 V	2.25	3370
354	4 18 36.7	+58 13 13	17.46	3.60	2.75	1.79	0.85	0.29	0.74	1.16	a7 V	2.30	3920
355	4 18 36.7	+58 22 17	15.86		3.99	2.84	1.25	0.50	1.13	1.84	g9 III	1.99	4200
356	4 18 37.1	+58 22 38	17.52		2.91:	2.09	0.98	0.41	0.81	1.27	g1 IV	1.64	4040
357	4 18 37.2	+58 11 25	17.75	3.77	2.86:	1.86	0.87	0.29	0.75	1.16	a7 V-IV	2.48	4110
358	4 18 37.2	+58 14 39	18.01	3.87		2.25	1.05	0.37	0.99	1.42			
359	4 18 37.3	+58 14 09	17.94			1.83	0.87	0.30	0.83	1.27			
360	4 18 37.3	+58 25 43	16.10	4.47:	3.92:	2.74	1.00	0.58	1.07	1.52	k4.5 V	1.00	408
361	4 18 37.4	+58 18 09	17.63	3.61	2.69:	1.79	0.87	0.32	0.73	1.14	a8 V	2.26	3970
362	4 18 37.5	+58 12 53	16.72	3.64	2.67	1.68	0.79	0.28	0.68	1.05	a6 III	2.16	5530
363	4 18 37.7	+58 12 24	16.07	3.74	2.73	1.73	0.83	0.31	0.69	1.10	a5 V	2.35	2420
364	4 18 37.8	+58 24 30	17.90			2.87:	1.02:	0.55	1.14	1.69	k5.5 V	0.88	840
365	4 18 37.9	+58 21 20	16.49	3.29	2.52	1.78	0.86	0.33	0.77	1.15	f4 IV	1.66	3030
366	4 18 37.9	+58 14 14	16.00	4.66	3.84	2.73	1.25	0.46	1.11	1.76	g6 III	2.21	3840
367	4 18 37.9	+58 09 57	16.87	3.67	2.74	1.67	0.80	0.27	0.68	1.06	a3 IV	2.38	5230
368	4 18 37.9	+58 08 10	17.25		2.76:	1.72	0.80	0.24	0.77	1.14	a3 V-III	2.54	4590
369	4 18 38.0	+58 17 40	16.71	3.43	2.75	1.90	0.90	0.35	0.84	1.35	g0 IV	1.45	3100
370	4 18 38.0	+58 15 46	16.80	3.48	2.57	1.56	0.75	0.27	0.61	0.97	a4 V-III	2.05	4270
371	4 18 38.1	+58 26 45	17.81		2.79:	1.82	1.00:	0.34	0.69:	1.06	b9.5 V	3.20	6480
372	4 18 38.2	+58 07 13	18.25			1.80:	0.86	0.29	0.83	1.31			
373	4 18 38.2	+58 24 21	17.32	3.96::	3.34:	2.28	1.01:	0.40	0.99	1.41	k0.7 V	1.36	960
374	4 18 38.2	+58 14 05	17.49		2.76:	1.81	0.90	0.29	0.75	1.19	a9 III	2.20	6350
375	4 18 38.3	+58 16 27	15.97	3.55	2.63	1.68	0.84	0.31	0.73	1.11	a7 IV	2.11	2840
376	4 18 38.3	+58 19 44	17.60	4.06		2.35	1.04	0.40	1.00	1.47	g6 IV	1.81	3560
377	4 18 38.4	+58 26 25	17.90		2.72::	1.84:	0.95:	0.25:	0.91:	1.35	a9:	2.40	
378	4 18 38.4	+58 21 32	17.93	3.43		1.92:	0.86	0.31	0.88	1.38	g3 V	1.32	2380
379	4 18 38.5	+58 16 34	16.44	3.59:	2.58	1.64	0.80	0.29	0.68	1.09:	a8 III	1.92	4760
380	4 18 38.5	+58 14 11	18.07			2.07	0.93:	0.33	0.96	1.42	g0 V	1.77	2510
381	4 18 38.6	+58 19 16	16.76	3.51	2.57	1.65	0.80	0.29	0.72	1.13	a7 IV	2.02	4260

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
382	4 18 38.7	+58 13 39	16.52	3.96:	3.16	2.31	1.05	0.38	0.99	1.46	g1.5 III	1.83	5470
383	4 18 38.8	+58 15 01	16.83	3.62:	2.64	1.67	0.81	0.31	0.63	0.99	a5 V-III	2.17	3730
384	4 18 38.9	+58 15 10	16.84	3.67	2.71	1.71	0.83	0.22	0.69	1.06	a5 V-III	2.29	3550
385	4 18 39.0	+58 14 55	16.04	3.70:	2.66	1.63	0.81	0.29	0.69	1.08	a2 V-III	2.47	2980
386	4 18 39.1	+58 12 43	17.93	3.78		2.32:	1.09	0.39	0.99	1.57:	g0 V-IV	2.23	1900
387	4 18 39.2	+58 11 51	15.93	4.47	3.68	2.60	1.18	0.43	1.06	1.67	g6 III	1.92	4250
388	4 18 39.2	+58 16 53	17.35	3.51	2.64	1.68	0.83	0.29	0.67	1.05	a7 V	2.13	4030
389	4 18 39.3	+58 14 03	16.02	4.59	3.78	2.68	1.23	0.44	1.10	1.75	g6 III	2.11	4060
390	4 18 39.5	+58 07 38	16.39		2.73	1.94	0.94	0.31	0.86	1.28	f2 V	2.21	1720
391	4 18 39.8	+58 27 03	17.13	3.49:	2.60:	1.90	0.92	0.40	0.79	1.23	f4 V:	1.94	2360
392	4 18 39.8	+58 11 29	18.06	3.56		1.97	0.93	0.37:	0.81	1.23	f3 V-IV	2.13	3570
393	4 18 39.9	+58 20 26	16.61	3.67	2.70	1.75	0.85	0.32	0.75	1.17	a7 IV	2.25	3570
394	4 18 40.0	+58 14 51	17.56	3.50	2.76:	1.88	0.91	0.34	0.80	1.20	f1 V	2.16	3240
395	4 18 40.1	+58 14 29	17.85	3.71	2.66:	1.82	0.89	0.29	0.80	1.18	f2 III:	1.92	7020
396	4 18 40.2	+58 22 04	17.63		2.88:	2.09	0.97	0.38	0.85	1.33	f9 IV	1.84	4060
397	4 18 40.3	+58 15 54	13.27	3.81	3.15	2.22	0.96	0.38	0.90	1.33	g8 IV	1.22	620
398	4 18 40.4	+58 17 47	18.11		2.86:	1.77	0.93	0.32	0.86:	1.27	a1.5 V-III	2.96	6480
399	4 18 40.5	+58 23 56	14.59	3.12	2.46	1.74	0.81	0.29	0.73	1.04	f8 IV	1.20	1380
400	4 18 40.7	+58 19 26	17.89	3.53	2.61:	1.79	0.88	0.32	0.74	1.15	f0 V	2.13	4080
401	4 18 41.0	+58 12 52	17.88:	: 3.57	2.71:	1.79	0.89	0.29	0.74	1.23	a9 V-IV	2.22	4080
402	4 18 41.2	+58 16 53	17.59	3.57	2.58	1.68	0.87	0.29	0.71	1.15	b9.5 V	2.84	6930
403	4 18 41.3	+58 19 10	16.11	3.54	2.59	1.56	0.75	0.28	0.61	0.96	a4 V	2.10	3040
404	4 18 41.3	+58 08 56	16.66	3.47	2.70	1.96	0.94	0.32	0.87	1.32	f4 V	2.05	1800
405	4 18 41.5	+58 08 18	16.74	3.79:	2.74	1.67	0.78	0.27	0.64	0.98			
406	4 18 41.7	+58 09 48	17.09	3.65	2.75	1.71	0.81	0.28	0.73	1.10	a5 V-III	2.29	3980
407	4 18 41.8	+58 13 26	16.37	4.84	3.95:	2.85	1.33	0.46	1.20	1.96			
408	4 18 41.8	+58 16 07	17.17	3.51:	2.59	1.73	0.84	0.32	0.73	1.12	a9 V	2.07	3180
409	4 18 41.8	+58 17 52	17.12			2.65	1.19	0.49	1.04	1.60	g9.5 V	2.21	660
410	4 18 41.9	+58 17 58	18.03			2.21:	1.05:	0.37	0.99	1.54	f9 V-IV	2.20	2170
411	4 18 41.9	+58 16 04	17.91			3.09:	1.20	0.67	1.25	1.85	k5 V	1.67	640
412	4 18 41.9	+58 11 55	17.36:	3.51	2.80:	1.95	0.95	0.38	0.83	1.30			
413	4 18 42.2	+58 14 35	16.61	3.67	2.69	1.70	0.78	0.30	0.67	1.03	a6 III	2.18	5180
414	4 18 42.3	+58 08 58	17.55		2.63:	1.59	0.75	0.24	0.61	0.96	a3 V-III	2.20	6160
415	4 18 42.3	+58 14 11	17.44	3.71	2.73	1.61	0.77	0.27	0.66	1.01	a2 V-III	2.44	5750
416	4 18 42.4	+58 10 53	16.18	3.41	2.68	1.94	0.94	0.34	0.85	1.28	f6 V	1.84	1360
417	4 18 42.4	+58 27 40	16.48	3.58:	2.57	1.59	0.76	0.31	0.63	0.96	a5 V-III	2.06	3340
418	4 18 42.5	+58 09 36	13.79	4.95	4.13	2.89	1.25	0.49	1.12	1.77	k0.7 III	1.70	1900
419	4 18 42.5	+58 13 17	17.93		2.78::	1.91	0.87	0.31	0.80	1.23	g5	1.15	
420	4 18 42.6	+58 18 03	16.52	3.80	3.09	2.18	1.02	0.38	0.91	1.40	g4 IV	1.67	2380
421	4 18 42.6	+58 24 55	17.48		2.95:	2.21:	1.11:	0.46:	0.93:	1.39	f6 V	2.41	1900
422	4 18 42.6	+58 16 12	15.54	4.54	3.69	2.63	1.19	0.44	1.05	1.67			
423	4 18 42.7	+58 11 06	16.25	3.73	2.72	1.70	0.89	0.32	0.73	1.13	a0.5 V	2.78	3330
424	4 18 42.8	+58 15 58	17.90	3.46	2.62:	1.81	0.86	0.36	0.73	1.15	f0 V	2.07	4240
425	4 18 42.8	+58 16 56	18.08	3.57		1.84	0.90	0.35	0.79	1.27	f0 V	2.24	4250
426	4 18 42.8	+58 17 58	18.33			1.85:	0.91	0.34	0.73	1.22	a5 V-III	2.60	6100
427	4 18 42.8	+58 13 25	17.60		2.84:	1.91	0.91	0.30	0.84	1.25			
428	4 18 42.9	+58 17 12	15.77	4.60	3.70	2.66	1.22	0.44	1.09	1.71	g5.5 III	2.13	3570
429	4 18 42.9	+58 13 51	15.94	4.70:	3.79	2.65	1.24	0.41	1.18	1.87			
430	4 18 43.0	+58 24 49	15.12	3.18	2.43	1.77	0.81	0.29	0.75	1.09	f5 V	1.50	1060
431	4 18 43.1	+58 14 43	17.43	3.66:	2.73:	1.79	0.85	0.34	0.70	1.09	a7 V	2.31	3830
432	4 18 43.1	+58 14 58	17.62	3.49	2.68	1.82	0.85	0.31	0.72	1.13	f0 V	2.10	3660
433	4 18 43.4	+58 16 38	14.81	3.35	2.51	1.59	0.74	0.27	0.62	0.96	a7 V	1.87	1410
434	4 18 43.4	+58 14 32	16.28	2.99	2.22	1.31	0.66	0.25	0.55	0.80			
435	4 18 43.4	+58 13 22	17.97		2.67:	1.85	0.90	0.29	0.82	1.23	f1 V-III	2.14	3950
436	4 18 43.4	+58 19 19	18.42	4.08		1.87:	0.87:	0.33	0.73	1.17:	a3:	2.83	
437	4 18 43.5	+58 25 52	15.47	4.06	3.48	2.44	0.93	0.46	0.94	1.36	k3 V	0.96	381
438	4 18 43.5	+58 11 54	18.16	3.22		1.85	0.99	0.33	0.79	1.28			
439	4 18 43.6	+58 15 04	17.58		2.75:	1.96	0.97	0.34	0.87	1.36	f2 V	2.28	2890
440	4 18 43.7	+58 26 32	17.74			2.27:	0.91:	0.37:	0.94:	1.42	g9.5 IV	1.04	5260
441	4 18 43.8	+58 14 16	17.23	3.66	2.67	1.71	0.88	0.26	0.71	1.10	a0 V-III	2.78	5620
442	4 18 43.8	+58 27 37	18.07:			2.17:	0.97:	0.43:	0.82:	1.27:	g9 V	1.22	1700
443	4 18 43.8	+58 11 31	18.09	3.46		1.87	0.92	0.33	0.76	1.19			
444	4 18 44.0	+58 22 37	17.25	3.37:	2.55	1.65	0.78	0.31	0.63	1.00	a8 V	1.92	3910
445	4 18 44.0	+58 16 13	17.81	3.57	2.69:	1.79	0.86	0.30	0.75	1.14	a9 V	2.20	3990

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
446	4 18 44.0	+58 13 02	16.05	4.62	3.84	2.75	1.25	0.44	1.12	1.76	g6 III	2.20	3930
447	4 18 44.1	+58 28 29	18.06			2.04:	0.90:	0.45:	0.76:	1.23:			
448	4 18 44.2	+58 13 21	16.94	3.77	2.82	1.84	0.89	0.30	0.79	1.23	a7 V-III	2.51	2790
449	4 18 44.3	+58 15 27	16.86	3.53	2.64	1.76	0.84	0.30	0.73	1.11	a9 V	2.13	2670
450	4 18 44.3	+58 26 29	17.95		2.65:	1.95:	0.91:	0.32:	0.86:	1.30	f7 V	1.72	3010
451	4 18 44.7	+58 16 33	15.88	3.58	2.72	1.68	0.80	0.27	0.67	1.03	a4 V	2.30	2500
452	4 18 44.7	+58 15 57	15.81	3.76	2.73	1.82	0.88	0.31	0.80	1.25	f0 III	2.10	2890
453	4 18 44.8	+58 15 00	17.19	3.57	2.66	1.68	0.80	0.28	0.70	1.10	a6 IV	2.13	5270
454	4 18 45.1	+58 06 06	18.03			1.94:	0.93	0.36	0.85	1.30	f6 V-III	1.84	3200
455	4 18 45.3	+58 09 56	17.77	3.78		2.23	1.00	0.37	0.92	1.44	g2 III	1.53	
456	4 18 45.4	+58 15 27	16.71	3.45	2.58	1.66	0.81	0.30	0.69	1.06	a8 V	2.02	2910
457	4 18 45.5	+58 10 06	17.17	3.57	2.85	2.02	1.02	0.34	0.89	1.40	f7 IV	1.99	3240
458	4 18 45.6	+58 12 25	17.06:	3.84	2.85	1.86	0.92	0.31	0.77	1.25			
459	4 18 45.7	+58 19 37	18.07	3.39	2.63:	1.83	0.85	0.29	0.78	1.19	f2 V	1.92	4260
460	4 18 45.8	+58 17 17	17.73	3.64	2.80:	1.78	0.88	0.33	0.79	1.25	a7 V	2.39	4240
461	4 18 45.9	+58 13 39	15.90	4.51:	3.72	2.65	1.22	0.45	1.10	1.72	g8.5 IV	2.17	1330
462	4 18 46.0	+58 24 49	17.23	3.43:	2.73:	2.02	0.89	0.33	0.91	1.37	g1 V	1.54	1770
463	4 18 46.1	+58 16 06	17.20	3.47	2.69	1.79	0.88	0.33	0.74	1.18	a9 V	2.16	3070
464	4 18 46.2	+58 20 56	16.47	4.61	3.98:	2.70	1.02	0.57	1.04	1.48	k4 V:	1.24	464
465	4 18 46.2	+58 15 14	15.88	4.48	3.65	2.60	1.18	0.44	1.07	1.68	g6 III	1.92	4150
466	4 18 46.4	+58 25 02	16.57	3.56:	2.60	1.73	0.86	0.32	0.77	1.16	f2 III	1.74	4230
467	4 18 46.5	+58 13 34	17.42		2.92	2.18	1.01	0.32	0.94	1.43	f9 V-IV	2.04	1770
468	4 18 46.6	+58 14 24	15.88	3.62	2.65	1.65	0.81	0.31	0.65	1.04	a4 V	2.24	2550
469	4 18 46.6	+58 14 17	17.00	3.63:	2.64	1.67	0.83	0.30	0.68	1.04	a5 V	2.22	3930
470	4 18 46.7	+58 14 57	16.01	3.69	2.72	1.83	0.87	0.33	0.77	1.18	f2 III	1.91	3020
471	4 18 46.7	+58 17 51	16.15	3.69	2.71	1.68	0.81	0.30	0.70	1.09	a4 IV	2.34	3490
472	4 18 46.7	+58 20 28	17.71	3.52	2.62	1.91	0.89	0.33	0.86	1.32	f7 III	1.57	6730
473	4 18 46.8	+58 15 48	15.88	3.77	2.72	1.78	0.87	0.31	0.79	1.23	a9 III	2.16	3090
474	4 18 46.9	+58 13 37	16.42	3.73:	2.66	1.63	0.80	0.25	0.71	1.08	a3 V-III	2.38	3380
475	4 18 47.0	+58 12 55	18.54			1.99:	0.85	0.33	0.90	1.44	g6 V	1.24	2670
476	4 18 47.0	+58 15 16	16.99	3.50:	2.69	1.65	0.81	0.28	0.65	1.03	a4 V:	2.24	4270
477	4 18 47.1	+58 21 45	14.71	3.18	2.57	1.80	0.80	0.32	0.75	1.07	g1 IV	0.99	1490
478	4 18 47.2	+58 16 08	17.82	3.62	2.66:	1.77	0.92	0.35	0.75	1.26	b9 V	3.12	7240
479	4 18 47.3	+58 14 57	16.64	3.59:	2.71	1.68	0.78	0.27	0.68	1.05	a4 V	2.31	3530
480	4 18 47.3	+58 20 04	16.29	3.62	2.67	1.63	0.76	0.28	0.64	1.00	a3 IV	2.27	4200
481	4 18 47.3	+58 15 12	17.89		2.66:	1.80	0.95	0.36	0.69	1.11	b9 V:	3.15	7400
482	4 18 47.4	+58 14 53	17.12	3.73:	2.67	1.72	0.83	0.31	0.75	1.15			
483	4 18 47.4	+58 19 20	16.60	3.38	2.57	1.51	0.71	0.43:	0.50	0.84	a4 V:	1.89	4180
484	4 18 47.4	+58 15 54	16.31		2.80	1.70	0.82	0.27	0.71	1.11	a3 IV	2.53	3780
485	4 18 47.5	+58 14 28	17.81		3.29::	2.40	1.12	0.38	1.07	1.64	g2.5 III	1.99	9250
486	4 18 47.5	+58 16 42	15.23	4.56	3.73	2.63	1.10	0.38	1.08	1.72	g8.5 III	1.65	3650
487	4 18 47.6	+58 18 55	18.40	3.43		1.94:	0.95	0.34	0.90	1.38	f9 V	1.70	3240
488	4 18 47.6	+58 28 20	17.67		2.61:	1.90:	0.89:	0.41	0.81:	1.20	g1.5 V	1.27	2380
489	4 18 47.6	+58 16 45	15.99	3.72	2.75	1.82	0.89	0.31	0.79	1.22	a7 V-IV	2.43	1870
490	4 18 47.8	+58 15 58	14.70	3.92	3.06:	2.00:	0.97	0.34	0.90	1.48:	a7 V-III	2.85	850
491	4 18 47.8	+58 26 11	17.71		2.75:	2.03	0.96:	0.32	0.98:	1.44	g0 V	1.72	2180
492	4 18 47.9	+58 17 54	16.93	3.49:	2.70	1.96	0.95	0.35	0.85	1.31	f4 V	2.06	2030
493	4 18 48.0	+58 27 07	17.03	3.44:	2.68:	1.75	0.81:	0.34	0.68	1.00	a8 V:	2.12	3230
494	4 18 48.0	+58 13 49	17.18		2.74	1.77	0.82	0.28	0.75	1.12	a8 III	2.17	5970
495	4 18 48.2	+58 09 29	16.57	3.58:	2.74	1.67	0.77	0.28	0.66	1.02	a4 V-IV:	2.29	3440
496	4 18 48.3	+58 19 08	15.83	3.62	2.63	1.71	0.82	0.30	0.71	1.09	a9 III	1.95	3340
497	4 18 48.5	+58 13 26	18.17			1.83	0.84	0.31	0.89	1.30	g0 V-III	1.31	3250
498	4 18 48.5	+58 12 58	18.17	3.81		2.11:	1.04	0.35	0.95	1.47	f4 V	2.48	2970
499	4 18 48.5	+58 21 08	14.00		4.46	3.13	1.31	0.52	1.21	1.93	k1.7 III	1.87	1990
500	4 18 48.6	+58 14 24	16.82	3.60	2.66	1.66	0.77	0.30	0.65	1.01	a5 V	2.16	3740
501	4 18 48.6	+58 13 48	15.72	4.52:	3.79	2.72	1.21	0.46	1.08	1.69	g7 III	1.98	3830
502	4 18 48.6	+58 16 41	16.60	3.76	2.72	1.68	0.81	0.31	0.68	1.06			
503	4 18 48.6	+58 14 36	15.60	4.39	3.54	2.54	1.16	0.44	1.05	1.66			
504	4 18 48.7	+58 22 21	16.56	3.88:	3.19	2.25	0.96	0.41	0.91	1.36	k0 V	1.31	740
505	4 18 48.7	+58 16 09	15.77	3.72	2.75	1.85	0.90	0.33	0.80	1.22	f1 III	2.05	2720
506	4 18 48.9	+58 29 28	16.57	3.17	2.47	1.82	0.86	0.37	0.73	1.19	f7 V	1.39	1860
507	4 18 49.0	+58 16 20	15.74	3.14	2.24	1.32	0.67	0.26	0.54	0.80	a0 V	1.95	4150
508	4 18 49.0	+58 21 26	14.90	3.23	2.43	1.56	0.76	0.28	0.66	1.00	a9 V	1.70	1310
509	4 18 49.0	+58 21 09	12.93	3.24	2.38	1.55	0.76	0.26	0.65	0.92	f0 IV	1.59	710

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) o ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
510	4 18 49.1	+58 17 03	17.60	3.66	2.79:	1.93	0.95	0.36	0.83	1.32	f0 V	2.40	3160
511	4 18 49.2	+58 13 25	15.78	3.84:	3.08	2.27	1.08	0.39	0.98	1.51	f9 V-IV	2.31	730
512	4 18 49.2	+58 16 55	16.49	3.70:	2.71	1.69	0.81	0.30	0.69	1.06	a4 V-IV	2.36	3210
513	4 18 49.3	+58 10 52	17.92	3.53	2.67:	1.82	0.89	0.31	0.74	1.16	f0 V	2.16	4090
514	4 18 49.4	+58 12 18	16.56	3.67	2.72	1.69	0.80	0.29	0.65	1.02	a4 V-IV	2.32	3370
515	4 18 49.4	+58 13 41	16.88	3.60	2.70	1.80	0.87	0.32	0.75	1.16	a9 V	2.24	2570
516	4 18 49.5	+58 16 46	15.96	3.83	2.78	1.80	0.88	0.33	0.77	1.23	a8 III	2.29	3210
517	4 18 49.5	+58 28 00	18.07			2.43:	1.15:	0.54:	0.99:	1.46			
518	4 18 49.5	+58 19 09	18.14	3.53	2.75:	2.00	0.93	0.38	0.83	1.31	f9 IV	1.69	5510
519	4 18 49.5	+58 16 07	15.43	3.69	2.66	1.64	0.80	0.29	0.69	1.05	a3 IV	2.36	2720
520	4 18 49.5	+58 22 44	15.35	3.49	2.73	1.93	0.92	0.36	0.82	1.24	f6 IV	1.87	1520
521	4 18 49.6	+58 13 10	17.08	3.72	2.79	1.75	0.82	0.29	0.68	1.07	a5 V	2.36	3840
522	4 18 49.6	+58 14 03	14.99	3.67	2.68	1.70	0.82	0.30	0.72	1.11	a5 V-IV	2.28	1520
523	4 18 49.6	+58 18 19	17.20	3.63	2.67	1.76	0.80	0.30	0.69	1.05			
524	4 18 49.7	+58 17 25	15.68	4.68	3.84	2.72	1.22	0.45	1.10	1.75			
525	4 18 49.8	+58 26 13	17.26		2.65:	1.92	0.90:	0.36	0.81:	1.28	g1.5 V	1.29	1940
526	4 18 49.8	+58 10 32	15.63	3.38	2.61	1.80	0.89	0.31	0.80	1.20	f2 V	1.94	1370
527	4 18 49.8	+58 13 21	17.91		2.66:	1.75	0.81	0.27	0.84	1.24			
528	4 18 49.9	+58 18 52	15.28	4.53	3.72	2.66	1.19	0.44	1.05	1.67	g6 III	2.00	3040
529	4 18 50.0	+58 08 56	15.59	3.53	2.72	1.95	0.94	0.31	0.87	1.29	f3 V	2.13	1140
530	4 18 50.0	+58 15 06	16.77	3.60:	2.63	1.73	0.86	0.32	0.75	1.19	a8 IV	2.15	3710
531	4 18 50.2	+58 14 23	15.86	4.51:	3.64	2.58	1.16	0.41	1.09	1.68			
532	4 18 50.3	+58 14 13	16.74	3.52:	2.61	1.64	0.81	0.27	0.67	1.03	a5 V-III	2.14	3640
533	4 18 50.3	+58 08 14	16.48	3.88:	3.08	2.19	1.03	0.35	0.98	1.49	g0 IV	2.08	2090
534	4 18 50.3	+58 20 43	16.67	3.34	2.49	1.77	0.86	0.32	0.75	1.15	f4 IV	1.66	3290
535	4 18 50.3	+58 14 54	17.06	3.75:	2.96	2.11	1.00	0.36	0.88	1.37	g0 IV	1.87	3010
536	4 18 50.4	+58 20 33	17.45	3.60	2.93:	2.14	0.94	0.37	0.87	1.29	g6 V	1.44	1470
537	4 18 50.4	+58 08 47	17.57	3.54::	2.74:	1.97	0.96	0.29	0.91	1.37	f4 V	2.15	2610
538	4 18 50.4	+58 10 03	17.44	3.72	2.93:	2.10	1.02	0.35	0.93	1.40	f7 IV	2.18	3370
539	4 18 50.5	+58 28 07	17.75		2.55:	1.90:	0.87:	0.31:	0.87:	1.21:			
540	4 18 50.5	+58 14 26	17.66		2.70:	1.78	0.88:	0.32	0.76	1.20	a8 V-III	2.30	3970
541	4 18 50.6	+58 15 31	16.02	3.51	2.52	1.48	0.71	0.26	0.56	0.87	a2 V-IV	2.14	3430
542	4 18 50.7	+58 16 43	17.50		2.73	1.84	0.85	0.33	0.76	1.19	f4 I	1.97	
543	4 18 50.7	+58 17 38	16.59	3.69	2.66	1.68	0.81	0.31	0.71	1.10			
544	4 18 50.8	+58 13 18	18.26	3.53		1.82	0.94	0.34	0.82	1.29			
545	4 18 50.9	+58 14 23	17.31		2.75	1.77	0.81	0.30:	0.77	1.14	a6 V	2.38	3850
546	4 18 50.9	+58 15 52	15.68	3.77	2.71	1.68	0.82	0.30	0.71	1.09	a2 IV	2.58	2880
547	4 18 50.9	+58 11 44	17.69	2.92	2.78:	1.78	0.90	0.36	0.70	1.17			
548	4 18 51.0	+58 09 07	15.97	3.40	2.58	1.73	0.85	0.29	0.77	1.15	f0 V	2.00	1790
549	4 18 51.1	+58 16 39	15.56	4.63	3.84	2.73	1.22	0.44	1.10	1.74	g8 III	1.92	3690
550	4 18 51.1	+58 12 53	16.51	3.71	2.73	1.75	0.86	0.31	0.75	1.14	a6 V	2.38	2680
551	4 18 51.2	+58 17 08	16.98	3.76	2.75	1.75	0.82	0.31	0.67	1.07	a6 III	2.30	5840
552	4 18 51.2	+58 16 45	17.49		2.72:	1.88	0.91	0.31	0.87	1.33	f5 III	1.85	5610
553	4 18 51.3	+58 16 50	16.60	3.68	2.76	1.66	0.80	0.30	0.64	1.02	a4 V	2.33	3430
554	4 18 51.3	+58 15 05	16.77	3.59	2.65	1.67	0.80	0.30	0.66	1.03	a5 V	2.18	3620
555	4 18 51.3	+58 14 19	15.08	4.64	3.93	2.79	1.14	0.38	1.10	1.71	g9.5 III	1.69	3410
556	4 18 51.6	+58 17 01	17.90		2.80:	2.19	0.99	0.38	0.94	1.46	g1 V:	1.82	2120
557	4 18 51.6	+58 14 41	16.14	3.79	2.79	1.87	0.92	0.34	0.80	1.24	f1 III	2.12	3110
558	4 18 51.6	+58 14 16	16.59		2.69	1.75	0.82	0.28	0.72	1.15	a9 III	2.03	4560
559	4 18 51.7	+58 05 50	17.48			2.07:	0.98	0.31	0.97	1.46:			
560	4 18 51.7	+58 15 07	17.29	3.56:	2.66	1.71	0.77	0.30	0.69	1.06			
561	4 18 51.7	+58 23 44	17.52	3.41:	2.67:	1.77	0.91	0.37	0.73	1.19	a9 V	2.14	3590
562	4 18 51.7	+58 21 34	17.44	3.57	2.61	1.54	0.72	0.28	0.58	0.94	a2 V-III	2.22	6390
563	4 18 51.9	+58 20 38	16.50	3.13	2.26	1.31	0.64	0.25	0.49	0.74	a4 V	1.49	4810
564	4 18 51.9	+58 15 14	15.98	3.53	2.63	1.63	0.81	0.29	0.66	1.05	a5 V-IV	2.12	2590
565	4 18 51.9	+58 23 39	16.14	3.62	2.64	1.64	0.79	0.28	0.67	1.06	a4 V-III	2.24	2890
566	4 18 52.1	+58 12 01	17.94	3.59		1.81	0.86	0.31	0.72	1.06	a8 V	2.25	4600
567	4 18 52.2	+58 11 38	16.22	3.77	2.77	1.78	0.86	0.31	0.74	1.16	a6 V-IV	2.44	2280
568	4 18 52.2	+58 07 43	15.21	3.62	2.86	2.06	0.99	0.34	0.88	1.33	f7 IV	2.03	1290
569	4 18 52.3	+58 28 09	14.58	4.90	4.04	2.90	1.24	0.50	1.09	1.73	k0 III	1.88	2510
570	4 18 52.4	+58 15 43	16.47	3.66	2.66	1.66	0.79	0.28	0.64	1.01	a4 V	2.26	3330
571	4 18 52.4	+58 19 36	17.02	3.56	2.77	1.97	0.97	0.37	0.86	1.35	f3 V	2.19	2150
572	4 18 52.5	+58 15 40	16.87	3.67:	2.73	1.75	0.83	0.27	0.75	1.11	a6 V-III	2.35	3190
573	4 18 52.5	+58 21 00	16.63	3.28	2.49	1.67	0.85	0.27	0.77	1.15			

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) o ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
574	4 18 52.5	+58 28 49	17.82:		2.58:	1.84:	0.86:	0.44:	0.80:	1.10:	g1.5 V:	1.18	2640
575	4 18 52.5	+58 14 47	18.01	3.63	2.62:	1.97:	0.98	0.31	0.90	1.41			
576	4 18 52.6	+58 16 16	16.62	3.70	2.71	1.67	0.78	0.29	0.65	1.00	a4 V	2.31	3480
577	4 18 52.6	+58 13 50	15.84	3.76	2.73	1.77:	0.87	0.29:	0.83	1.24	a7 IV	2.38	2350
578	4 18 52.7	+58 20 31	17.89	3.43	2.51:	1.72	0.89	0.28	0.74	1.14			
579	4 18 52.7	+58 09 12	17.91		2.52:	1.69:	0.86	0.27	0.80	1.24:	f1	1.92	
580	4 18 52.7	+58 14 21	15.06	4.37	3.51	2.45	1.16	0.43	1.04	1.69			
581	4 18 52.8	+58 21 30	17.41	3.54	2.96:	2.12	0.97	0.39	0.88	1.34	g5.5 V	1.47	1490
582	4 18 52.8	+58 08 28	18.04			1.92	0.98	0.28	0.96	1.45	f2 V-III:	2.38	3400
583	4 18 52.9	+58 13 36	16.89	3.87	3.12	2.26	1.08	0.40	0.96	1.48	g0 IV	2.16	2440
584	4 18 52.9	+58 15 13	17.28	3.61:	2.69	1.73	0.88	0.32	0.67	1.02	a6 V	2.28	3980
585	4 18 52.9	+58 12 27	17.50	4.90		2.93	1.32	0.45	1.19	1.90	g5.5 III	2.62	6290
586	4 18 52.9	+58 11 27	16.10	3.68	2.68	1.62	0.80	0.29	0.64	1.05	a3 IV	2.33	3760
587	4 18 53.0	+58 24 26	16.94		3.86:	2.62	1.07	0.56	1.01	1.52	k3.5 V:	1.28	600
588	4 18 53.2	+58 15 02	17.20	3.53	2.68	1.90	0.94	0.35	0.80	1.24	f3 IV	2.01	3660
589	4 18 53.2	+58 17 22	17.17			2.72	1.22	0.48	1.10	1.71	g8.5 IV	2.25	2310
590	4 18 53.4	+58 17 13	17.10	3.71::	2.65	1.70	0.83	0.28	0.71	1.11	a8 III	2.05	6090
591	4 18 53.4	+58 13 06	15.51	4.68	3.82	2.76	1.25	0.45	1.11	1.74			
592	4 18 53.5	+58 15 54	15.78	4.54	3.74	2.69	1.21	0.44	1.08	1.69	g6 III	2.05	3740
593	4 18 53.6	+58 28 04	17.38		2.62:	1.94:	0.93:	0.36	0.87	1.25	f7 V	1.72	2320
594	4 18 53.6	+58 12 10	17.28	3.57:	2.73	1.84	0.88	0.32	0.78	1.21	a9 V	2.28	3030
595	4 18 53.7	+58 13 28	16.63	4.51	3.81:	2.71	1.22	0.45	1.09	1.71	g6 III	2.08	5470
596	4 18 53.8	+58 16 34	17.46	3.76	2.79	1.83	0.85	0.33	0.70	1.11			
597	4 18 53.9	+58 17 50	16.85	3.54	2.62	1.61	0.76	0.28	0.64	0.99	a4 V	2.14	4180
598	4 18 53.9	+58 12 52	17.57:	3.51	2.69	1.78	0.86	0.30	0.70	1.13	a9 V	2.13	3700
599	4 18 54.0	+58 29 09	15.48	4.28	3.64	2.50	0.96	0.55	0.87	1.27	k4.5 V:	0.55	377
600	4 18 54.0	+58 15 33	17.13	3.66	2.61	1.75	0.88	0.29	0.73	1.12			
601	4 18 54.0	+58 14 05	18.23	3.59		2.09:	1.00	0.33	0.99	1.49	f9 V	1.95	2670
602	4 18 54.2	+58 16 04	17.62	3.65	2.74:	1.88:	0.90	0.36	0.75	1.20:	a9 V	2.32	3480
603	4 18 54.4	+58 15 12	15.48	3.93	3.00	2.16	1.06	0.37	0.94	1.47	f7 III	2.19	1810
604	4 18 54.4	+58 18 05	16.64	3.66	2.74	1.77	0.86	0.32	0.71	1.14	a6 V	2.34	2890
605	4 18 54.6	+58 17 15	15.92	3.62	2.65	1.62	0.78	0.29	0.66	1.03	a3 IV	2.28	3530
606	4 18 55.0	+58 12 50	17.84	3.40	2.90:	2.04	1.00	0.36	0.87	1.37			
607	4 18 55.1	+58 14 44	18.00		2.98::	2.03	0.92:	0.36	0.95	1.45			
608	4 18 55.2	+58 16 52	16.55	3.60:	2.71	1.76	0.86	0.33	0.74	1.13	a7 V	2.31	2560
609	4 18 55.2	+58 13 41	15.95	3.75	2.74	1.73	0.84	0.31	0.71	1.11	a5 V-IV	2.38	2260
610	4 18 55.4	+58 12 29	17.91	4.07		2.39:	1.05	0.40	1.00	1.52			
611	4 18 55.5	+58 15 22	16.89	3.63	2.75	1.79	0.85	0.29	0.73	1.13	a7 V	2.31	2990
612	4 18 55.5	+58 14 51	17.20	3.75:	2.83	1.84	0.86	0.31	0.72	1.09	a6 V	2.47	3510
613	4 18 55.5	+58 23 58	18.11			2.47:	1.02:	0.36:	1.02:	1.56	g7 III	1.42	
614	4 18 55.5	+58 15 01	16.71	3.64	2.69	1.65	0.80	0.29	0.66	1.01	a4 V-III	2.28	3690
615	4 18 55.5	+58 16 41	17.07	3.74:	2.73	1.74	0.83	0.29	0.72	1.06	a6 V-III	2.34	3520
616	4 18 55.7	+58 24 35	17.38		3.16:	2.28:	1.09:	0.46:	0.91:	1.45	g1.5 IV	2.05	3090
617	4 18 55.8	+58 14 35	16.74	3.63	2.72	1.80	0.87	0.33	0.72	1.12	a8 V	2.29	2600
618	4 18 55.8	+58 13 58	17.10	3.75	2.80	1.78	0.87	0.23	0.70	1.11	a5 V	2.42	3750
619	4 18 55.8	+58 15 53	15.43	4.49	3.74	2.67	1.19	0.43	1.07	1.66	g8 III	1.75	3770
620	4 18 55.9	+58 13 51	17.34		2.74	1.79	0.86	0.28	0.72	1.12	a9 III	2.12	6170
621	4 18 56.3	+58 12 43	16.10	3.73	2.77	1.73	0.84	0.31	0.73	1.14	a4 V-III	2.44	2570
622	4 18 56.3	+58 19 57	15.73	3.94	3.33	2.32	0.93	0.43	0.92	1.32	k1.5 V	1.16	461
623	4 18 56.3	+58 28 21	17.19	3.29:	2.42	1.61	0.72	0.30	0.64	0.96	f3 III	1.27	6780
624	4 18 56.3	+58 14 11	17.39	3.61	2.80:	1.89	0.92	0.34	0.77	1.25	a9 V	2.35	3070
625	4 18 56.4	+58 09 54	17.29	3.38	2.67:	1.78	0.87	0.30	0.77	1.18	f2 III:	1.67	6100
626	4 18 56.4	+58 14 21	16.79	3.70:	2.76	1.81	0.87	0.31	0.77	1.17	a7 V	2.42	2720
627	4 18 56.6	+58 15 33	17.01	3.62:	2.65	1.71	0.82	0.27	0.71	1.10	a9 III	1.95	5720
628	4 18 56.7	+58 03 45	17.55			2.70:	1.15	0.47	1.08	1.61	k0 IV	1.88	3260
629	4 18 56.7	+58 16 01	16.83	3.66	2.69	1.70	0.80	0.31	0.63	1.01	a5 V	2.22	3640
630	4 18 56.8	+58 13 17	16.61	3.76	2.76	1.76	0.84	0.31	0.69	1.08	a6 III	2.33	4860
631	4 18 56.9	+58 10 54	14.32	3.52:	2.52	1.61	0.85	0.26	0.72:	1.05	b9.5 V	2.73	1620
632	4 18 56.9	+58 13 02	17.49	3.65	2.74	1.78	0.87	0.30	0.74	1.16	a7 IV	2.27	5310
633	4 18 56.9	+58 15 31	15.28	4.50:	3.81	2.72	1.18	0.43	1.09	1.70	g8 III	1.85	3370
634	4 18 56.9	+58 12 47	16.98		2.86:	1.78:	0.83	0.26:	0.80	1.17:	a3 V-III	2.78	3620
635	4 18 57.1	+58 14 44	15.13	3.74	2.72	1.76	0.86	0.32	0.77	1.18	a8 III	2.18	2310
636	4 18 57.2	+58 08 36	17.60		2.64:	1.94	0.95	0.28	0.89	1.32	f5 V	1.96	2670
637	4 18 57.2	+58 04 43	17.98			2.20:	1.06:	0.36	0.93	1.40	f9 V-III	2.10	2220

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
638	4 18 57.3	+58 14 23	15.03	4.46	3.72	2.63	1.16	0.45	1.06	1.66	k0 IV	1.83	1050
639	4 18 57.3	+58 13 24	17.84		2.70:	1.95:	0.96	0.32	0.84	1.27	f4 V-III	2.07	3080
640	4 18 57.3	+58 13 52	16.44	3.79	2.77	1.86	0.90	0.32	0.78	1.22	f1 III	2.09	3640
641	4 18 57.3	+58 16 53	15.73	3.54	2.67	1.64	0.80	0.28	0.69	1.04	a4 V-IV	2.25	2380
642	4 18 57.4	+58 12 05	17.80	3.50	2.76:	1.98	0.95	0.34	0.84	1.29	f7 IV	1.84	4620
643	4 18 57.5	+58 22 29	16.54		3.93:	2.78	1.24	0.49	1.11	1.79	g9 III	1.89	6020
644	4 18 57.5	+58 18 14	17.40	3.84	2.88	1.94	0.93	0.34	0.82	1.31	a9 IV	2.50	3810
645	4 18 57.5	+58 16 13	16.63	3.78:	2.70	1.77	0.87	0.29	0.76	1.17	a9 III	2.14	4410
646	4 18 57.6	+58 24 19	16.20	3.76	3.16	2.20	0.93	0.37	0.89	1.29	g9.5 IV	0.90	2750
647	4 18 57.8	+58 15 19	16.20	3.66	2.70	1.65	0.79	0.29	0.65	1.04	a3 IV	2.34	3910
648	4 18 57.9	+58 09 50	16.35	4.37::	3.78:	2.70	1.24	0.44	1.13	1.75			
649	4 18 57.9	+58 13 19	17.28	3.79:	2.79	1.83	0.86	0.31	0.68	1.06	a6 V:	2.42	3740
650	4 18 58.1	+58 15 49	17.91		2.67:	1.81	0.94:	0.34	0.74	1.21	b8.5 V	3.30	7600
651	4 18 58.1	+58 07 13	16.73			2.65	1.22	0.40	1.14	1.82	g2.5 III	2.46	4540
652	4 18 58.2	+58 18 27	18.19	3.58		1.96	0.95	0.36	0.86	1.30	f3 V	2.17	3710
653	4 18 58.4	+58 19 11	16.94	3.61	2.62	1.67	0.81	0.31	0.69	1.11	a8 III	1.96	5880
654	4 18 58.5	+58 18 54	17.88	3.46	2.63:	1.77	0.82	0.35	0.74	1.17	f0 V	2.05	4230
655	4 18 58.5	+58 15 46	16.29	3.63	2.64	1.64	0.79	0.29	0.66	1.03	a4 V	2.24	3090
656	4 18 58.5	+58 12 00	17.54	3.53	2.72	1.95	0.96	0.33	0.82	1.26	f4 IV	2.03	4130
657	4 18 58.6	+58 15 14	15.54	3.66	2.71	1.74	0.86	0.32	0.74	1.15	a6 V	2.32	1750
658	4 18 58.7	+58 13 57	15.26	4.59:	3.74	2.62	1.22	0.45	1.08	1.71			
659	4 18 58.8	+58 07 21	17.42		2.83:	2.01	0.95	0.31	0.94	1.46	f9 V-III	1.82	1950
660	4 18 58.9	+58 11 04	18.21	3.50		1.86:	0.93	0.36	0.79	1.26	f2 V	2.08	4240
661	4 18 58.9	+58 15 08	15.34	4.46	3.60	2.58	1.18	0.43	1.07	1.68			
662	4 18 59.0	+58 21 59	16.26	3.61	2.81	2.01	0.96	0.35	0.89	1.38	f6 IV	2.05	2120
663	4 18 59.0	+58 16 51	17.53	3.58:	2.89:	2.10	1.00	0.39	0.91	1.41	g1.5 V	1.75	1780
664	4 18 59.2	+58 15 55	18.10			2.02:	0.98	0.42	0.76	1.19	a5:	2.88	
665	4 18 59.2	+58 17 58	15.89	5.34	4.48	3.16	1.36	0.54	1.22	1.95	k1.2 III	2.12	4150
666	4 18 59.3	+58 14 01	17.11	3.76:	2.75	1.76	0.81	0.33	0.67	1.07	a5 V-III:	2.36	3890
667	4 18 59.3	+58 04 27	17.81			1.68	0.84	0.29	0.65	1.07	a3 V	2.41	6280
668	4 18 59.4	+58 14 35	17.57	3.58	2.65	1.82	0.85	0.27	0.77	1.15	f0 IV	2.11	4700
669	4 18 59.4	+58 17 06	17.58	3.65	2.72	1.86	0.89	0.34	0.81	1.25	f3 III	1.87	6130
670	4 18 59.5	+58 15 29	18.05		2.75:	1.89	0.95	0.33	0.76	1.17	a9 V	2.40	4080
671	4 18 59.6	+58 14 03	16.66	3.70	2.75	1.70	0.79	0.20:	0.69	1.10	a4 V-III	2.38	3430
672	4 18 59.8	+58 07 38	16.17		2.68	1.62	0.79	0.27	0.66	1.00	a3 V-IV	2.34	3050
673	4 18 59.8	+58 28 05	17.70		2.59:	1.90:	0.91:	0.31:	0.89:	1.29:	f7 V	1.68	2750
674	4 18 59.9	+58 25 59	18.05		2.56:	1.90	0.92:	0.32:	0.95:	1.45	f7 V-III:	1.68	3220
675	4 18 59.9	+58 14 12	17.89		2.70:	1.85	0.85	0.27	0.83	1.29	f0 V-III	2.22	3940
676	4 18 59.9	+58 19 13	17.74	3.60	2.70	1.76	0.88	0.34	0.74	1.14	a8 V	2.27	4160
677	4 18 59.9	+58 14 16	16.56	3.98:	3.21	2.31	0.99	0.39	0.94	1.41	g6 IV	1.64	2390
678	4 19 00.0	+58 25 34	17.43		2.81:	2.05	1.00:	0.41	0.90	1.39	f6 V	2.12	2140
679	4 19 00.0	+58 08 39	18.20			2.10:	1.02	0.25	1.04	1.49			
680	4 19 00.0	+58 10 53	17.08	3.59	2.91	2.06	1.00	0.34	0.91	1.39	g0 IV	1.76	3190
681	4 19 00.0	+58 23 03	16.91			3.26	1.40	0.60	1.19	1.95	k1.5 III	2.20	6470
682	4 19 00.1	+58 29 00	17.30		3.00:	2.25:	1.02:	0.47	0.83	1.30			
683	4 19 00.2	+58 07 24	16.40		2.84	1.88	0.92	0.29	0.88	1.34	a7 V-III	2.65	2040
684	4 19 00.2	+58 14 50	17.37		2.81	2.01	0.96	0.33	0.91	1.36	f7 III	1.86	5050
685	4 19 00.2	+58 05 19	16.16		2.80	1.76	0.85	0.27	0.75	1.19	a3 V-IV	2.63	2670
686	4 19 00.2	+58 10 41	17.27	3.46	2.56	1.58	0.76	0.28	0.59	0.94	a5 V	1.97	5020
687	4 19 00.3	+58 13 47	16.03	3.76	2.73	1.75	0.85	0.31	0.73	1.13	a7 III	2.25	3600
688	4 19 00.3	+58 14 18	17.05	3.49:	2.67	1.70	0.81	0.29	0.70	1.08	a6 V	2.19	3720
689	4 19 00.4	+58 14 45	16.26	3.53	2.59	1.53	0.72	0.26	0.57	0.89	a3 IV	2.09	4500
690	4 19 00.5	+58 15 26	15.75	3.65	2.65	1.63	0.79	0.29	0.66	1.04	a3 V-IV	2.31	2550
691	4 19 00.6	+58 10 59	18.01			1.81	0.87	0.31	0.81	1.21	f3 V-III	1.84	3980
692	4 19 00.6	+58 13 06	17.60	3.74	2.92:	1.86	0.88	0.32	0.75	1.16	a6 V:	2.49	4180
693	4 19 00.6	+58 15 59	15.56	3.64	2.70:	1.66:	0.81	0.29	0.64	1.08:	a4 V	2.28	2170
694	4 19 00.7	+58 23 54	18.38			1.76:	1.04:	0.48:	0.79:	1.24			
695	4 19 00.7	+58 21 44	18.31	3.64		1.96:	0.94	0.32	0.86	1.36	f1 V-III	2.34	4190
696	4 19 00.8	+58 17 58	16.80	3.61	2.64	1.65	0.80	0.31	0.63	1.02	a5 V	2.16	3700
697	4 19 00.8	+58 04 49	15.18	3.90	3.26	2.19	0.94	0.39	0.89	1.29	g9.5 III	0.52	6110
698	4 19 00.8	+58 12 34	16.99	3.67	2.84	1.79	0.83	0.31	0.67	1.06	a5 V:	2.38	3640
699	4 19 01.0	+58 16 46	15.13	2.66	1.99	1.24	0.63	0.25	0.52	0.73			
700	4 19 01.0	+58 24 18	17.68		2.70:	1.89	0.95	0.37	0.83	1.30	f1 V	2.24	3290
701	4 19 01.1	+58 14 40	18.02		2.70:	1.73	0.81	0.30	0.64	1.08	a5 V-III	2.24	6270

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
702	4 19 01.1	+58 05 36	14.61	4.67	3.74	2.69	1.25	0.45	1.12	1.81			
703	4 19 01.3	+58 15 11	17.98::	3.50	2.74:	1.87	0.90	0.34	0.79	1.20	f0 V	2.21	4110
704	4 19 01.3	+58 17 52	17.54		2.80:	1.79	0.91	0.30	0.75	1.21	a3 V-III	2.71	4870
705	4 19 01.3	+58 11 59	15.88	3.92	3.02	2.23	1.09	0.38	0.98	1.53	f4 V	2.68	940
706	4 19 01.4	+58 24 14	17.03	3.55	2.75	1.90	0.99	0.38	0.81	1.30	f1 V	2.26	2430
707	4 19 01.5	+58 24 02	17.26	3.50:	2.60	1.64	0.75	0.28	0.69	1.06	a6 V	2.07	4350
708	4 19 01.7	+58 08 59	16.01	3.57	2.57	1.50	0.74	0.25	0.64	1.00	a3 IV	2.14	3930
709	4 19 01.7	+58 20 23	16.66	3.48	2.57	1.62	0.78	0.28	0.67	1.06	a6 V	2.03	3350
710	4 19 01.7	+58 14 33	16.61	3.73:	2.72	1.70	0.86	0.30	0.70	1.12	a3 V-III	2.49	3500
711	4 19 02.0	+58 23 29	15.71	3.57	2.64	1.70	0.81	0.34	0.69	1.07	a6 V	2.17	2030
712	4 19 02.0	+58 19 25	17.23	3.45	2.70	1.95	0.95	0.35	0.87	1.35	f6 V	1.89	2150
713	4 19 02.1	+58 09 09	16.28	3.68	2.65	1.62	0.81	0.28	0.71	1.06	a3 III	2.39	5000
714	4 19 02.1	+58 15 21	15.68	3.69	2.69	1.74	0.82	0.32	0.72	1.11	a6 V-IV	2.31	1880
715	4 19 02.2	+58 14 41	16.38	3.72	2.74	1.71	0.83	0.30	0.66	1.03	a4 V	2.38	3020
716	4 19 02.3	+58 05 25	18.09			1.80:	0.88	0.29	0.85	1.33:			
717	4 19 02.3	+58 14 29	16.22	3.67	2.72	1.66	0.80	0.28	0.68	1.07	a3 V-IV	2.41	3030
718	4 19 02.4	+58 09 16	16.81	3.40	2.61	1.82	0.88	0.31	0.80	1.21	f2 V	1.96	2350
719	4 19 02.5	+58 21 00	16.72	3.43	2.65	1.91	0.92	0.35	0.81	1.25	f5 IV	1.86	2980
720	4 19 02.5	+58 26 11	17.29		2.97:	2.19	0.97	0.42	0.88	1.31			
721	4 19 02.5	+58 19 38	16.69	3.47	2.58	1.59	0.79	0.26	0.67	1.03	a5 V-IV	2.03	3740
722	4 19 02.5	+58 29 23	17.65:		2.43:	1.45:	0.70:	0.32:	0.53:	0.82:	a1.5 V	2.06	7900
723	4 19 02.5	+58 15 32	14.58	3.42	2.55	1.59	0.76	0.28	0.64	0.97	a6 V	1.95	1340
724	4 19 02.6	+58 12 28	17.44	3.69	2.93	2.17	1.01	0.37	0.91	1.38	f9.5 V	2.01	1740
725	4 19 02.7	+58 16 07	16.33	4.17	3.34	2.42	1.13	0.41	1.05	1.63	g2.5 IV	2.33	1640
726	4 19 02.7	+58 19 41	17.93		2.57:	1.77:	0.82	0.31	0.78	1.21	f1 V-III	1.92	4290
727	4 19 02.9	+58 06 54	14.70	3.61	2.79	1.99	0.95	0.35	0.88	1.34	f3 V	2.23	720
728	4 19 02.9	+58 18 32	17.99	3.39	2.74:	1.93	0.93	0.33	0.88	1.34	f9 V	1.63	2760
729	4 19 02.9	+58 08 48	18.40			1.91:	0.88:	0.34:	0.87:	1.28	f9.5 V-III	1.49	3430
730	4 19 03.0	+58 16 28	15.71	4.58	3.76	2.68	1.22	0.44	1.08	1.72	g6 III	2.08	3560
731	4 19 03.0	+58 09 15	17.38			1.80	0.89	0.28	0.90	1.36	f2 V-III	2.04	2930
732	4 19 03.0	+58 09 18	16.62	3.37	2.70	1.88	0.90	0.33	0.84	1.25	g0 IV	1.39	3060
733	4 19 03.3	+58 14 04	16.40	3.80	2.74	1.80	0.90	0.30	0.84	1.24	f0 III	2.15	3710
734	4 19 03.3	+58 16 19	15.66	4.43	3.74	2.69	1.20	0.44	1.08	1.70	g9.5 IV	1.96	1320
735	4 19 03.3	+58 10 45	17.09	3.37:	2.57	1.50	0.74	0.26	0.63	0.94	a1.5 V-III:	2.23	5650
736	4 19 03.4	+58 29 28	16.74	3.70:	3.03:	2.19	0.97	0.47	0.80	1.30			
737	4 19 03.4	+58 03 56	17.55			1.97	0.99:	0.32	0.99	1.55	f2 V-III:	2.47	2600
738	4 19 03.4	+58 08 55	17.91		2.45:	1.71	0.81	0.25	0.83	1.21			
739	4 19 03.4	+58 14 07	16.81	3.67	2.69	1.73	0.81	0.27	0.73	1.14	a8 III	2.08	5270
740	4 19 03.6	+58 12 51	15.64	3.53	2.93	2.08	0.92	0.37	0.88	1.28	g8 V	1.16	620
741	4 19 03.7	+58 14 28	17.56	3.61:	2.70	1.76	0.87	0.29	0.79	1.15	a7 V-IV	2.34	4020
742	4 19 03.8	+58 15 48	15.99	3.76	2.77	1.78	0.86	0.32	0.73	1.13	a6 V-IV	2.42	2060
743	4 19 03.8	+58 12 59	17.81		2.73:	1.90	0.92	0.28	0.82	1.24	f1 V-III	2.23	3510
744	4 19 03.9	+58 26 17	17.31		2.72:	2.04	0.95:	0.34	0.89	1.35	f7 V	1.89	2080
745	4 19 03.9	+58 24 38	18.03		2.76::	1.87:	0.88:	0.32:	0.86:	1.30:	a9 V-III	2.40	4050
746	4 19 04.0	+58 18 49	15.62	3.56	2.56	1.55	0.74	0.28	0.62	0.96	a3 IV	2.14	3280
747	4 19 04.0	+58 15 09	16.85	3.71	2.75	1.75	0.82	0.30	0.69	1.08	a5 V	2.34	3480
748	4 19 04.0	+58 05 03	18.15			2.14:	1.00	0.33	1.01	1.51:	g0 V	2.00	2340
749	4 19 04.2	+58 13 20	17.66	3.57	2.81:	2.01	1.01	0.35	0.88	1.39	f5 IV	2.13	4040
750	4 19 04.2	+58 09 20	17.41		2.76	1.77	0.83	0.29	0.72	1.08	a6 V-III	2.36	4070
751	4 19 04.3	+58 17 27	16.94	3.64	2.72	1.76	0.85	0.33	0.71	1.10	a6 V	2.31	3350
752	4 19 04.3	+58 08 24	18.26			1.78:	0.81	0.28	0.77	1.17	f9 V-IV	1.20	3830
753	4 19 04.3	+58 10 48	14.93	3.76	3.21	2.23	0.94	0.41	0.90	1.31	k1.2 V	1.00	354
754	4 19 04.3	+58 15 20	16.02	3.70	2.74	1.68	0.82	0.29	0.68	1.07	a3 IV	2.42	3470
755	4 19 04.4	+58 22 52	17.30		2.72	1.87	0.91	0.34	0.80	1.27	f3 III	1.91	5300
756	4 19 04.4	+58 14 31	15.65	4.60	3.82	2.70	1.23	0.45	1.07	1.69	g8 III	1.87	3940
757	4 19 04.4	+58 14 00	15.65	3.72	2.73	1.73	0.85	0.30	0.72	1.13	a5 V-IV	2.36	1990
758	4 19 04.4	+58 17 41	17.46	3.83:	3.16:	2.26	1.06	0.40	0.96	1.51	g4 IV	1.83	3410
759	4 19 04.5	+58 15 50	17.09		2.74	1.73	0.81	0.28	0.77	1.20:	a6 V-III	2.35	3540
760	4 19 04.5	+58 16 46	17.39	3.58:	2.77	1.86	0.90	0.38	0.73	1.21	a9 V	2.33	3110
761	4 19 04.6	+58 13 02	17.06		3.52:	2.52	1.13	0.39	1.10	1.68	g5 III	1.87	7230
762	4 19 04.6	+58 25 56	18.08:		2.66:	1.87:	0.82:	0.37:	0.81:	1.27:	g7 V	0.81	2440
763	4 19 04.7	+58 15 17	18.00		2.74:	1.76:	0.84:	0.26:	0.83:	1.32:	a7 V-III	2.39	4810
764	4 19 04.7	+58 04 47	17.22			2.12	1.02	0.36	0.91	1.40	f7 V	2.13	1790
765	4 19 04.8	+58 13 42	16.25	3.74	2.74	1.74	0.86	0.31	0.75	1.17	a5 V-III	2.40	2570

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	Av mag	d pc
766	4 19 04.9	+58 20 05	18.05	4.06		2.47:	1.06	0.47	1.02	1.53	k1.2 V	1.55	1150
767	4 19 05.0	+58 24 21	17.72			2.91:	1.32:	0.50	1.12:	1.78	g9.5 IV	2.45	2710
768	4 19 05.0	+58 16 48	15.97	3.72	2.73	1.70	0.82	0.29	0.71	1.12	a4 V-IV	2.39	2490
769	4 19 05.0	+58 05 14	14.87	2.59	2.00	1.29	0.70	0.25	0.56	0.85			
770	4 19 05.0	+58 14 01	15.89	3.79	2.79	1.76	0.84	0.30	0.70	1.11	a4 V-IV	2.49	2290
771	4 19 05.1	+58 24 10	17.31	3.42:	2.70	1.90	0.89	0.33	0.84	1.25	g0 IV	1.40	4180
772	4 19 05.1	+58 20 37	16.35	3.62	2.65	1.63	0.78	0.30	0.66	1.06	a4 IV	2.22	4040
773	4 19 05.2	+58 19 05	16.94	3.40	2.60	1.66	0.79	0.30	0.66	1.02	a8 V	1.96	3320
774	4 19 05.2	+58 11 37	16.17	3.72	2.73	1.73	0.82	0.30	0.71	1.08	a5 V	2.34	2540
775	4 19 05.2	+58 08 54	16.19	3.62	2.64	1.62	0.78	0.27	0.70	1.06	a3 V-III	2.32	3120
776	4 19 05.4	+58 17 45	17.65	4.23		2.41	1.11	0.45	1.02	1.60	g8.5 V:	1.98	1040
777	4 19 05.5	+58 20 40	18.14		2.82:	1.81	0.88	0.29	0.83	1.29	a7 V-III	2.53	4810
778	4 19 05.6	+58 11 27	17.08	4.67	3.78::	2.86	1.31	0.49	1.14	1.89	g3 III	2.73	4740
779	4 19 05.7	+58 18 51	17.32	3.52	2.65	1.66	0.78	0.33	0.64	1.01	a6 V	2.08	4450
780	4 19 05.7	+58 09 16	17.84:		2.76:	1.76	0.84	0.33	0.71	1.07	a5 V-III	2.40	5330
781	4 19 05.7	+58 08 34	17.14	3.50:	2.64	1.78	0.90	0.29	0.85	1.24	f1 IV	2.07	3750
782	4 19 05.8	+58 12 55	17.54	3.57	2.66	1.77	0.83	0.29	0.73	1.16	a9 IV	2.09	4910
783	4 19 05.9	+58 29 26	15.09	4.45	3.72	2.63	1.14	0.52	0.98	1.57	k1.7 V:	1.83	244
784	4 19 05.9	+58 25 24	17.07	3.92:	3.02:	2.17	0.99	0.33	0.96	1.44	f7 III	2.16	3820
785	4 19 06.1	+58 06 17	17.73		2.58:	1.78	0.85	0.29	0.81	1.22	f2 V-III	1.89	3700
786	4 19 06.1	+58 13 56	16.15	3.78	2.76	1.78	0.84	0.27	0.75	1.14	a8 III	2.21	3640
787	4 19 06.2	+58 13 22	16.15	3.72	2.73	1.74	0.86	0.31	0.74	1.19	a5 V-IV	2.38	2470
788	4 19 06.5	+58 13 55	17.51		2.85:	1.78:	0.83:	0.31	0.71:		a3 V-III	2.66	4900
789	4 19 06.5	+58 04 37	16.74		3.01:	2.16	1.01	0.35	0.94	1.44	f9.5 IV	2.02	2450
790	4 19 06.5	+58 18 46	16.04	3.49	2.54	1.52	0.72	0.27	0.63	0.95	a3 IV	2.08	4100
791	4 19 06.5	+58 29 24	14.61	5.61:	4.68	3.35	1.42	0.63	1.23	2.01	k1.5 III	2.36	2090
792	4 19 06.5	+58 14 55	16.30	3.63	2.68	1.66	0.81	0.29	0.68	1.04	a4 V-IV	2.29	3030
793	4 19 06.6	+58 13 21	15.59	3.72	2.70	1.65	0.81	0.25:	0.69:	1.07	a3 IV	2.39	2880
794	4 19 06.7	+58 11 38	17.75	3.59	2.79:	1.83	0.87	0.32	0.77	1.15	a8 V	2.31	4110
795	4 19 06.7	+58 15 01	18.05		2.75:	1.87	0.91	0.32	0.78	1.25	a9 V-III	2.36	4170
796	4 19 06.7	+58 19 58	17.38	4.21	3.53:	2.54	1.13	0.43	1.06	1.66	g8 IV	1.91	2980
797	4 19 06.7	+58 13 25	17.49		2.68	1.80	0.82	0.28	0.78	1.15	f0 IV	2.10	4560
798	4 19 06.8	+58 23 24	15.55	3.31	2.45	1.64	0.82	0.32	0.73	1.10	f0 V	1.81	1610
799	4 19 06.8	+58 04 13	17.19			2.16	0.97	0.35	0.97	1.47	g3 V	1.78	1370
800	4 19 06.8	+58 25 21	14.42	3.35	2.68	1.91	0.82	0.32	0.77	1.09	g1.5 III	0.88	3220
801	4 19 06.9	+58 14 06	18.53	3.86:		2.44:	1.10	0.43	1.06	1.53	g6 V-IV:	2.10	1780
802	4 19 07.0	+58 20 50	16.87	3.48	2.78	1.95	0.94	0.34	0.85	1.30			
803	4 19 07.0	+58 17 17	17.33		3.35:	2.36	1.08	0.43	0.97	1.47			
804	4 19 07.0	+58 17 25	16.34	3.64	2.69	1.67	0.79	0.30	0.67	1.02	a4 V	2.28	3100
805	4 19 07.1	+58 15 17	16.38	3.77	2.72	1.67	0.82	0.29	0.67	1.07	a2 V-IV	2.54	3370
806	4 19 07.3	+58 12 38	17.99	3.47	2.64:	1.88	0.91	0.27	0.85	1.22	f2 V	2.07	3840
807	4 19 07.4	+58 27 03	16.30	4.14:	3.43:	2.45	0.93	0.50	1.00	1.45	k3.2 V:	0.94	540
808	4 19 07.5	+58 24 51	12.36	3.17	2.43	1.70	0.77	0.28	0.70	1.02	f4 IV	1.44	499
809	4 19 07.5	+58 16 47	17.66	3.70	2.77:	1.88	0.90	0.36	0.77	1.16	a9 V	2.37	3440
810	4 19 07.5	+58 23 15	11.37	2.83	2.25	1.58	0.72	0.30	0.66		f9.5 V	0.71	192
811	4 19 07.6	+58 17 38	15.69	4.46	3.65	2.61	1.17	0.44	1.06	1.66	g6 III	1.90	3820
812	4 19 07.6	+58 17 02	18.22	3.36	2.70::	1.94	0.93	0.34	0.83	1.29	f9 V	1.59	3130
813	4 19 07.7	+58 12 01	15.80	4.74:	3.87	2.78	1.26	0.45	1.13	1.78			
814	4 19 07.8	+58 15 46	15.95	3.70	2.73	1.71	0.79	0.44:	0.55:	1.03	a4 V:	2.36	2500
815	4 19 07.8	+58 03 10	17.90			2.02:	0.97	0.33	0.96	1.50:	f9 V-III	1.89	2360
816	4 19 07.8	+58 29 26	17.84		2.67:	1.72:	0.91:	0.41:	0.78:	1.18			
817	4 19 07.9	+58 13 33	18.38	3.67		2.09:	1.04	0.37:	1.00:	1.48	f6 V	2.26	3100
818	4 19 08.0	+58 27 21	13.71	3.59	2.63	1.78	0.87	0.33	0.76	1.17	f3 III	1.73	1100
819	4 19 08.0	+58 23 31	17.10	3.33:	2.65	1.89	0.90	0.35	0.82	1.27	f8 IV	1.56	3700
820	4 19 08.2	+58 22 22	17.33		2.76	1.69	0.83	0.32	0.65	1.10	a2 V	2.58	5130
821	4 19 08.2	+58 03 54	16.68			2.94	1.32	0.48	1.20	1.93	g7 III	2.51	4640
822	4 19 08.4	+58 29 10	18.52:			1.81:	0.74:	0.41:	0.75:	1.14:	k1.2 V:	0.16	2730
823	4 19 08.4	+58 18 09	13.12	3.25	2.69	1.86	0.80	0.31	0.75	1.05	g5 IV	0.77	740
824	4 19 08.5	+58 12 19	17.09	4.05	3.41:	2.42	1.08	0.42	0.99	1.47	g8 IV	1.66	2920
825	4 19 08.6	+58 14 06	16.84	3.65	2.76	1.79	0.84	0.31	0.72	1.14	a7 V	2.32	2910
826	4 19 08.6	+58 15 35	17.44	3.63	2.67	1.80	0.88	0.32	0.78	1.23	f2 III	1.85	5980
827	4 19 08.7	+58 26 10	18.27:			1.85:	0.90:	0.33:	0.83:	1.32:	f3 V-III	1.95	4270
828	4 19 08.8	+58 06 01	17.22		2.86:	2.03	0.92:	0.32	0.93	1.39	g5 V-III	1.46	1420
829	4 19 09.1	+58 09 39	16.59	3.66	2.64	1.65	0.80	0.28	0.72	1.09	a5 V-III	2.22	3260

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	Av mag	d pc
830	4 19 09.2	+58 14 14	16.42	3.66	2.71	1.72	0.82	0.30	0.68	1.07	a5 V	2.28	2940
831	4 19 09.2	+58 12 50	18.22:	3.82		1.85:	1.02:	0.26:	0.84:	1.28:			
832	4 19 09.2	+58 13 49	16.08	4.68	3.83	2.73	1.25	0.44	1.12	1.76			
833	4 19 09.3	+58 13 24	17.97	3.62		1.96	0.95	0.30	0.87	1.30	f2 V	2.28	3450
834	4 19 09.3	+58 06 05	17.83			2.17:	0.96	0.32	0.94	1.38:	g2.5 III	1.40	
835	4 19 09.5	+58 17 21	16.79	3.61	2.89	2.09	0.98	0.36	0.90	1.38	f9.5 IV	1.82	2750
836	4 19 09.5	+58 11 20	16.92	3.62	2.70	1.69	0.82	0.31	0.65	1.03	a5 V	2.22	3790
837	4 19 09.6	+58 10 47	16.80	3.57	2.67	1.66	0.80	0.30	0.65	1.03	a5 V	2.16	3690
838	4 19 09.6	+58 22 58	17.33	3.39:	2.57	1.64	0.82	0.29	0.70	1.12	a7 V-IV	2.06	4120
839	4 19 09.7	+58 11 15	17.81		2.77:	2.07	1.00	0.36	0.92	1.39	f7 V	2.04	2440
840	4 19 09.7	+58 14 47	15.87	3.80	2.73	1.66	0.83	0.29	0.69	1.09	a3 III	2.51	3920
841	4 19 09.7	+58 21 31	17.97	3.67		2.09	0.99	0.34	0.88	1.39	f7 V	2.08	2570
842	4 19 09.9	+58 19 18	17.57:	3.67	2.94:	2.16	0.97	0.36	0.93	1.36	g3 V	1.73	1670
843	4 19 10.0	+58 15 07	17.15	3.69	2.82	1.73	0.84	0.32	0.67	1.09	a4 V-III	2.40	4260
844	4 19 10.1	+58 06 57	16.06		2.67	1.71	0.85	0.28	0.78	1.15	a7 V-III	2.28	2070
845	4 19 10.2	+58 18 18	16.49	3.65	2.64	1.58	0.78	0.20	0.67	1.02	a3 V-III	2.28	3630
846	4 19 10.2	+58 16 17	16.94	3.72	2.78	1.76	0.82	0.30	0.67	1.06	a5 V	2.36	3590
847	4 19 10.2	+58 03 31	17.50			1.89	0.92	0.31	0.87	1.39	f2 V-III	2.16	2940
848	4 19 10.2	+58 15 55	13.39	5.13	4.19	3.04	1.34	0.48	1.19	1.91			
849	4 19 10.2	+58 19 39	16.50	3.63	2.61	1.67	0.81	0.30	0.71	1.08	a8 III	1.98	4760
850	4 19 10.2	+58 27 33	17.98			2.59:	1.16:	0.47:	1.06:	1.72	g8 IV	2.06	3650
851	4 19 10.3	+58 10 52	18.37			2.00	0.97	0.33	0.92	1.33	f9 V-III	1.79	3060
852	4 19 10.4	+58 11 59	17.74	3.75	2.80:	1.93	0.91	0.31	0.79	1.20	f3 III	1.98	6270
853	4 19 10.4	+58 09 00	17.63		2.62	1.68	0.78	0.27	0.72	1.06	a7 V-III	2.13	4580
854	4 19 10.5	+58 23 56	18.11		2.85::	2.03:	0.83:	0.30	0.95:	1.40	g2.5 III	1.09	
855	4 19 10.5	+58 15 19	15.11	3.84	2.78	1.76	0.86	0.31	0.76	1.20	a4 IV	2.54	1960
856	4 19 10.7	+58 18 23	17.67		2.68:	1.80	0.89	0.32	0.73	1.13	a9 V-IV	2.21	3740
857	4 19 10.7	+58 05 48	18.05:			2.27:	1.05	0.40:	0.94	1.47:	g4 V-III	1.93	1780
858	4 19 10.7	+58 13 02	17.45	3.74	2.80	1.83	0.87	0.31	0.72	1.13	a6 V	2.44	4010
859	4 19 10.7	+58 22 30	17.82			2.28	1.08	0.44	0.93	1.53	g4 V	1.98	1570
860	4 19 10.7	+58 13 21	18.50	3.66:		1.95:	0.93	0.29	0.89	1.37:	f2 V-III:	2.27	4420
861	4 19 10.8	+58 09 51	18.48	3.49		2.03:	0.95	0.34	0.92	1.36	g0 V	1.72	3100
862	4 19 10.9	+58 11 47	17.96	3.53		1.81	0.86	0.27	0.79	1.17	f0 V-III	2.15	4170
863	4 19 11.0	+58 21 14	18.28	3.41		1.93	0.93	0.33	0.88	1.35	f9 V	1.63	3160
864	4 19 11.1	+58 10 29	17.41	3.56	2.71	1.88	0.92	0.31	0.84	1.27	f2 IV	2.09	4020
865	4 19 11.1	+58 13 37	18.07	3.62	2.87::	1.87	0.92	0.33	0.79	1.26	a9 V-IV:	2.37	4170
866	4 19 11.2	+58 25 18	17.95		2.71:	1.90:	0.97:	0.42:	0.78:	1.23			
867	4 19 11.2	+58 15 54	17.59		2.69	1.92	0.95	0.31	0.85	1.33	f3 V	2.09	2930
868	4 19 11.3	+58 16 44	17.30	3.54:	2.75	1.73	0.83	0.30	0.69	1.13	a5 V-III:	2.32	4330
869	4 19 11.4	+58 16 26	18.15	3.70		1.88:	0.98	0.33	0.87	1.38			
870	4 19 11.4	+58 09 04	17.88			1.62	0.75	0.22	0.71	0.99	f9 V-III	0.88	3710
871	4 19 11.4	+58 14 13	15.95	4.68	3.87	2.76	1.25	0.46	1.12	1.78	g6 III	2.26	3680
872	4 19 11.4	+58 10 01	16.65	4.11	3.48	2.49	1.07	0.47	1.04	1.56	k0.7 V	1.67	610
873	4 19 11.5	+58 07 20	15.52	3.54	2.97	2.07	0.87	0.35	0.88	1.29	g7 IV	1.01	1940
874	4 19 11.6	+58 08 13	18.04		2.63:	1.64:	0.69	0.24	0.69	0.92:			
875	4 19 11.6	+58 04 43	17.52			2.67:	1.04	0.51	1.09	1.57	k3.2 V	1.40	770
876	4 19 11.6	+58 06 58	16.88		2.68	1.76	0.83	0.27	0.81	1.20			
877	4 19 12.0	+58 27 12	16.51	3.57	2.66	1.92	0.94	0.38	0.88	1.30	f3 V:	2.13	1750
878	4 19 12.0	+58 24 59	16.61	3.65	2.71	1.63	0.77	0.29	0.68	1.02	a3 V-III	2.35	3720
879	4 19 12.0	+58 24 57	16.92	3.69:	2.72	1.73	0.83	0.34	0.68	1.07	a5 V	2.32	3620
880	4 19 12.0	+58 17 08	17.99	3.54	2.63:	1.78	0.88	0.34	0.79	1.21	f3 III	1.74	7870
881	4 19 12.1	+58 12 50	17.71		2.76:	1.84	0.88	0.32	0.74	1.12	a8 V	2.35	3950
882	4 19 12.1	+58 10 15	16.64	4.15	3.56	2.49	0.99	0.49	0.96	1.18	k3 V	1.11	610
883	4 19 12.2	+58 19 03	16.94	3.44	2.79	2.02	0.91	0.36	0.85	1.26	g3 V	1.40	1450
884	4 19 12.2	+58 05 12	16.81		2.90	2.11	0.99	0.34	0.97	1.48	f9 V	1.99	1360
885	4 19 12.4	+58 15 50	17.40		2.75	1.78	0.91	0.32	0.72	1.11	a0 V	2.97	5570
886	4 19 12.4	+58 15 00	16.50	3.76	2.77	1.74	0.84	0.31	0.69	1.10	a4 V-III	2.45	3090
887	4 19 12.5	+58 04 51	15.84	3.39	2.57	1.77	0.88	0.30	0.80	1.26	f1 V	1.98	1590
888	4 19 12.5	+58 22 01	15.99	3.71	2.72	1.80	0.88	0.32	0.80	1.23	f0 III	2.07	3200
889	4 19 12.5	+58 17 44	15.31	4.45	3.68	2.63	1.16	0.42	1.06	1.65	g6 III	1.92	3200
890	4 19 12.6	+58 17 40	16.91			2.92	1.26	0.47	1.15	1.76	g9.5 III	2.06	6690
891	4 19 12.6	+58 22 24	17.49		2.72	1.90	0.94	0.34	0.81	1.28	f2 IV	2.12	4120
892	4 19 12.6	+58 07 57	17.93			1.81	0.84	0.30	0.82	1.14	f9 V-III	1.33	3090
893	4 19 12.6	+58 10 40	18.17	3.56		1.89:	0.95	0.32	0.84	1.37	f2 V	2.17	3970

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U−V mag	P−V mag	X−V mag	Y−V mag	Z−V mag	V−S mag	V−I mag	Photom. sp. type	Av mag	d pc
894	4 19 12.7	+58 06 06	18.13			2.04:	0.90	0.29	0.99	1.47	g0 V:	1.78	2570
895	4 19 12.8	+58 03 32	18.20			2.07:	0.98	0.32	0.91	1.38:	f9 V-III	1.86	2750
896	4 19 12.9	+58 12 52	16.70	3.86:	3.13	2.24	1.02	0.37	0.94	1.39	g4 IV	1.76	2480
897	4 19 13.0	+58 19 26	17.66		3.13:	2.14:	1.07	0.41	0.90	1.46			
898	4 19 13.1	+58 18 05	16.75	4.23	3.47	2.45	1.05	0.43	1.00	1.48	k0 IV	1.42	2790
899	4 19 13.1	+58 06 15	17.49			2.23	0.95	0.35	0.95	1.41	g3 III	1.38	
900	4 19 13.3	+58 16 05	14.56	5.16	4.28	3.03	1.32	0.48	1.16	1.85	k0.5 III	2.07	2280
901	4 19 13.3	+58 08 51	16.97	3.76:	3.03	2.15	0.95	0.34	0.96	1.38	g4 IV	1.59	3040
902	4 19 13.4	+58 18 51	15.37	4.64	3.81	2.72	1.20	0.45	1.08	1.70			
903	4 19 13.4	+58 14 51	18.31	3.69	2.80::	2.13:	0.97	0.37	0.94	1.40	f7 V-III:	2.13	2950
904	4 19 13.4	+58 16 30	18.05		2.64:	1.86	0.88	0.31	0.82	1.27	f2 V-III	2.01	4050
905	4 19 13.4	+58 11 58	13.96	3.44	2.60	1.71	0.83	0.31	0.72	1.10	a9 V	2.03	740
906	4 19 13.5	+58 13 08	17.67	3.63::	2.96:	2.02	1.01	0.37	0.91	1.38	a6 IV::	2.85	4730
907	4 19 13.5	+58 11 20	17.47	3.60	2.71	1.83	0.89	0.34	0.78	1.20	a9 V	2.27	3300
908	4 19 13.6	+58 19 28	16.88	3.42	2.56	1.57	0.72	0.28	0.63	0.97	a5 V	1.93	4250
909	4 19 13.7	+58 15 49	12.45	3.44	2.50	1.49	0.71	0.26	0.60	0.91	a3 IV	2.00	820
910	4 19 13.7	+58 12 28	17.83	3.50	2.68:	1.80	0.86	0.29	0.76	1.17	a9 V	2.16	4100
911	4 19 13.7	+58 25 29	17.80:		2.98:	2.19:	1.09:	0.34:	0.98:	1.50:	f4 V	2.60	2360
912	4 19 13.7	+58 14 24	15.94	3.74	2.72	1.72	0.83	0.30	0.71	1.11	a5 V-IV	2.35	2280
913	4 19 13.8	+58 23 45	16.81	3.66:	2.91	2.05	0.99	0.38	0.88	1.35			
914	4 19 13.8	+58 10 08	17.90	3.58		2.00	1.00	0.36	0.84	1.34			
915	4 19 13.9	+58 11 52	16.47			3.17	1.14	0.69	1.18	1.77	k7 V:	0.96	316
916	4 19 13.9	+58 17 23	16.62	3.75	2.78	1.73	0.81	0.31	0.67	1.05	a4 V	2.44	3280
917	4 19 14.1	+58 15 21	16.19	3.68	2.73	1.68	0.82	0.29	0.68	1.06	a4 V-IV	2.35	2800
918	4 19 14.2	+58 16 35	16.83	3.63	2.63	1.66	0.80	0.30	0.63	1.00	a5 V-III	2.16	3740
919	4 19 14.2	+58 13 10	16.74	3.69:	2.71	1.70	0.83	0.30	0.66	1.07	a4 V	2.36	3600
920	4 19 14.3	+58 21 07	17.68	3.63	2.72:	1.78	0.86	0.31	0.72	1.15	a7 V	2.31	4310
921	4 19 14.4	+58 10 32	16.35	3.68	2.70	1.63	0.79	0.29	0.68	1.05	a3 IV	2.36	4170
922	4 19 14.6	+58 20 22	16.43	3.35	2.54	1.79	0.87	0.32	0.77	1.18	f4 IV	1.72	2860
923	4 19 14.6	+58 08 40	15.54	3.35	2.57	1.77	0.86	0.31	0.80	1.19	f1 V	1.93	1420
924	4 19 14.7	+58 03 05	14.89	3.05	2.15	1.32	0.72	0.27	0.60	0.89	b9 V	2.22	2850
925	4 19 15.0	+58 18 03	16.18	3.12	2.25	1.31	0.68	0.25	0.55	0.79	a0 V	1.96	5070
926	4 19 15.0	+58 17 49	17.56	3.48	2.70	1.74	0.81	0.31	0.71	1.08	a8 V-IV	2.12	4120
927	4 19 15.0	+58 13 05	17.43:	3.62	2.73	1.77	0.88	0.33	0.73	1.17	a7 V	2.31	3830
928	4 19 15.1	+58 26 16	17.41			2.46:	1.05:	0.44:	1.04:	1.63:	k0.7 V	1.67	870
929	4 19 15.3	+58 24 46	15.17	6.00::	4.96:	3.46	1.42	0.62	1.31	2.07			
930	4 19 15.4	+58 15 00	17.20		2.87	1.82	0.89	0.32	0.75	1.17	a3 V-III	2.75	4080
931	4 19 15.4	+58 05 00	11.47	2.93	2.27	1.52	0.70	0.29	0.64		f2 V	1.25	278
932	4 19 15.6	+58 04 19	17.52			1.95	0.92	0.34	0.88	1.30	f9 V-III	1.63	2240
933	4 19 15.6	+58 27 19	18.07:		2.45::	1.73:	0.86:	0.23:	0.81:	1.20:	f4 V:	1.58	4290
934	4 19 15.6	+58 09 52	17.41	3.53	2.71	1.86	0.88	0.32	0.80	1.17	f0 V	2.21	3160
935	4 19 15.7	+58 12 20	17.97	3.51	2.68:	1.99	0.99	0.33	0.89	1.38	f5 V	2.07	3020
936	4 19 15.7	+58 24 39	16.44	3.44	2.61	1.78	0.89	0.32	0.79	1.21	f1 V	2.02	2060
937	4 19 16.0	+58 15 04	15.96	3.57	2.77	1.98	0.96	0.36	0.85	1.31	f5 IV	2.06	1910
938	4 19 16.4	+58 22 23	17.53	3.32:	2.51	1.51	0.70	0.29	0.54	0.86	a5 V	1.79	6150
939	4 19 16.5	+58 08 45	15.02	3.55	2.92	2.05	0.89	0.35	0.86	1.22	g5.5 IV	1.17	1470
940	4 19 16.5	+58 14 55	17.87	3.70		1.82	0.98	0.41:	0.69	1.23			
941	4 19 16.5	+58 20 51	15.01	5.18	4.35	3.03	1.28	0.51	1.13	1.79	k1.2 III	1.83	3170
942	4 19 16.6	+58 19 27	16.49	3.45	2.66	1.87	0.89	0.33	0.83	1.28	f2 V	2.04	1950
943	4 19 16.6	+58 17 52	16.45	3.21	2.45	1.40	0.65	0.27	0.49	0.76	a4 V:	1.67	4330
944	4 19 16.6	+58 12 26	17.06	4.84		2.86	1.30	0.47	1.17	1.87	g5.5 III	2.51	5430
945	4 19 16.7	+58 13 29	17.80	4.36		2.55	1.13	0.50	1.01	1.51	k1.2 V	1.79	930
946	4 19 16.7	+58 05 44	16.91		2.60:	1.57	0.74	0.25	0.70	1.07	a3 V-III	2.23	4510
947	4 19 16.8	+58 10 13	15.50	3.40	2.68	1.89	0.91	0.33	0.82	1.24	f6 IV	1.77	1710
948	4 19 16.9	+58 13 16	15.41	3.70	2.69	1.67	0.82	0.30	0.71	1.11	a4 IV	2.34	2480
949	4 19 16.9	+58 08 25	16.92	3.58:	2.55	1.51	0.74	0.24	0.64	0.92	a3 V-III	2.14	4730
950	4 19 16.9	+58 11 29	18.02:	3.55	2.58:	1.84	0.89	0.27	0.82	1.24	a8 IV:	2.19	6490
951	4 19 17.0	+58 25 20	18.13			2.12:	0.88:	0.32:	1.00:	1.49:			
952	4 19 17.0	+58 18 10	15.68	3.63	2.63	1.66	0.81	0.31	0.72	1.11	a5 IV	2.20	2730
953	4 19 17.3	+58 22 15	16.59	3.49	2.60	1.58	0.77	0.29	0.58	0.96	a4 V	2.09	3800
954	4 19 17.3	+58 20 22	17.99	3.51		1.65	0.75	0.27	0.65	0.97			
955	4 19 18.0	+58 19 31	17.57	3.37	2.55	1.68	0.77	0.30	0.69	1.05	a9 V	1.89	4120
956	4 19 18.0	+58 15 14	12.10	6.18	5.24	3.68	1.47	0.64	1.30		k4 III	1.86	930
957	4 19 18.0	+58 08 29	17.19		2.80	1.76	0.82	0.28	0.76	1.08	a3 V-III	2.61	4330

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U−V mag	P−V mag	X−V mag	Y−V mag	Z−V mag	V−S mag	V−I mag	Photom. sp. type	Av mag	d pc
958	4 19 18.0	+58 28 46	17.86:			2.72:	1.21:	0.51:	1.11:	1.75:	k0.7 V	2.24	820
959	4 19 18.1	+58 04 19	15.17		4.28	2.98	1.28	0.49	1.17	1.83	k1 III	1.85	3340
960	4 19 18.2	+58 14 44	17.13	3.72	2.78	1.75	0.84	0.32	0.71	1.13	a5 V	2.38	3900
961	4 19 18.2	+58 17 00	18.10	3.59	2.74::	1.82	0.93	0.36	0.76	1.25			
962	4 19 18.2	+58 19 54	17.52	3.88	3.42:	2.34	0.97	0.39	0.96	1.40	k0 IV:	1.06	4700
963	4 19 18.3	+58 18 45	16.06	3.53	2.60	1.59	0.74	0.29	0.62	0.97	a4 V-IV	2.10	2970
964	4 19 18.4	+58 10 02	15.86	4.35	3.53	2.54	1.17	0.43	1.08	1.67	g4 IV	2.48	1210
965	4 19 18.7	+58 12 25	16.83	3.66	2.66	1.71	0.84	0.29	0.69	1.08	a8 III	2.04	5380
966	4 19 18.9	+58 10 38	17.35	3.69	2.79	1.85	0.92	0.32	0.81	1.32	a9 V	2.41	2950
967	4 19 18.9	+58 27 53	17.97			2.10:	1.08:	0.44	0.80:	1.25			
968	4 19 18.9	+58 20 20	15.39	3.39	2.64	1.85	0.88	0.32	0.79	1.21	f6 IV	1.70	1680
969	4 19 18.9	+58 09 15	18.51			1.90:	0.84	0.32	0.88	1.26:	g3 V	1.19	3290
970	4 19 19.0	+58 05 51	14.52	3.46	2.66	1.91	0.91	0.33	0.86	1.28	f4 IV	1.94	1070
971	4 19 19.1	+58 16 14	16.57:	3.93::	2.86:	1.79:	0.92	0.36	0.94	1.66:	a0.5 V-III:	3.17	3230
972	4 19 19.2	+58 25 13	17.88		3.02:	2.15:	1.01:	0.47:	0.88:	1.40	g7 V	1.48	1640
973	4 19 19.2	+58 18 55	18.23	3.40	2.66:	1.91	0.89	0.35	0.79	1.21	f8 IV	1.59	6120
974	4 19 19.2	+58 12 45	16.30	3.62	2.68	1.59	0.78	0.28	0.63	1.01	a3 IV	2.26	4250
975	4 19 19.3	+58 28 44	17.85:			2.06:	0.85:	0.34:	0.95:	1.41:	g8 V	1.17	1720
976	4 19 19.5	+58 12 29	18.33		2.67::	1.96	0.89	0.34	0.83	1.27	g1 V	1.39	3150
977	4 19 19.5	+58 08 29	17.70			2.57	1.07	0.46	1.03	1.44	k1 V	1.78	920
978	4 19 19.5	+58 15 41	15.03	3.42	2.62	1.80	0.88	0.32	0.77	1.16	f1 V	2.01	1080
979	4 19 19.5	+58 10 32	17.00	3.50:	2.79	2.03	0.98	0.33	0.91	1.38	f9 V	1.80	1620
980	4 19 19.6	+58 10 50	17.58	3.62	2.66	1.80	0.87	0.32	0.72	1.13	f2 III	1.81	6520
981	4 19 19.7	+58 11 31	16.89	3.62	2.73	1.68	0.78	0.29	0.65	1.00	a4 V-III	2.29	3990
982	4 19 19.7	+58 13 14	17.27	3.61	2.80	1.99	1.00	0.38	0.88	1.41	f3 V	2.27	2320
983	4 19 19.9	+58 15 34	17.61		2.88:	2.11	1.04	0.38	0.93	1.45	f6 V	2.25	2180
984	4 19 20.3	+58 19 06	17.35	3.93	3.17:	2.29	1.03	0.40	0.94	1.43	g3 IV	1.92	3150
985	4 19 20.4	+58 21 24	17.74	3.65		2.14	1.01	0.40	0.87	1.40	g0 IV	1.84	4170
986	4 19 20.4	+58 03 38	15.46	3.61	2.81	2.01	0.96	0.36	0.85	1.30	f6 IV	2.02	1490
987	4 19 20.5	+58 16 32	16.47	3.72	2.76	1.67	0.81	0.29	0.66	1.04	a3 IV	2.42	4270
988	4 19 20.5	+58 04 33	15.95	3.35:	2.45	1.61	0.81	0.28	0.74	1.13			
989	4 19 20.8	+58 15 31	16.57	3.76:	2.74	1.72	0.85	0.31	0.70	1.12	a4 V	2.44	3200
990	4 19 21.0	+58 24 44	15.64	3.47	2.63	1.84	0.88	0.35	0.81	1.21			
991	4 19 21.0	+58 14 28	16.04	3.23:	2.63	1.82	0.91	0.33	0.81	1.23	f7 III:	1.44	3310
992	4 19 21.1	+58 21 03	16.96	3.66	3.04	2.16	0.96	0.38	0.89	1.33	g5.5 IV	1.38	3250
993	4 19 21.2	+58 04 53	18.16			1.87:	0.84:	0.36	0.92	1.40:	g1.5 V:	1.36	2850
994	4 19 21.2	+58 04 23	17.74			1.86:	0.92	0.31	0.88	1.35:	f2 V-III	2.14	3300
995	4 19 21.3	+58 15 43	17.81	3.81		2.21	1.04	0.38	0.94	1.44	f9.5 IV	2.09	3870
996	4 19 21.4	+58 04 20	17.74			1.59	0.77	0.29	0.60	0.99	a5 V	2.00	6160
997	4 19 21.4	+58 20 31	17.12	3.45	2.60	1.61	0.76	0.29	0.63	1.01	a5 V	2.00	4610
998	4 19 21.5	+58 16 19	17.90	4.05		2.41	1.06	0.46	0.97	1.48	k0 V	1.65	1170
999	4 19 21.8	+58 09 23	16.92		3.69:	2.69	1.24	0.48	1.08	1.71	g7 IV	2.40	1950
1000	4 19 22.0	+58 22 03	17.73			3.25:	1.33	0.74	1.34	2.16	m1 V	1.14	286
1001	4 19 22.2	+58 22 54	15.90	3.44	2.78	1.95	0.91	0.36	0.82	1.26	g1.5 IV	1.33	2180
1002	4 19 22.2	+58 22 30	12.64	3.26	2.43	1.40	0.65	0.26	0.52	0.74	a4 V	1.70	740
1003	4 19 22.4	+58 18 13	17.74	3.48	2.60:	1.73	0.90	0.29	0.72	1.16	a9 V	2.09	4070
1004	4 19 22.5	+58 17 19	16.66	3.63	2.70	1.65	0.82	0.31	0.68	1.08	a4 IV	2.29	4510
1005	4 19 22.6	+58 03 36	17.55			2.16:	0.99	0.36	0.97	1.51	g0 V-IV	1.98	1790
1006	4 19 22.7	+58 21 00	16.89	3.38	2.68	1.93	0.91	0.33	0.82	1.25	f8 IV	1.61	3280
1007	4 19 22.7	+58 11 39	17.00	3.69	2.77	1.74	0.83	0.30	0.71	1.08	a5 V-III	2.34	3720
1008	4 19 22.7	+58 18 03	14.60	5.08	4.31	2.98	1.27	0.50	1.13	1.81	k1.2 III	1.73	2740
1009	4 19 22.8	+58 12 38	17.21	3.51	2.60	1.69	0.80	0.29	0.68	1.07	a7 V	2.09	3840
1010	4 19 23.0	+58 26 50	18.19		2.60:	2.00:	0.98:	0.44:	0.76:	1.21:			
1011	4 19 23.0	+58 16 59	16.39	4.63:	3.65	2.65	1.24	0.46	1.07	1.74			
1012	4 19 23.1	+58 20 04	17.88	3.61	3.03:	2.13	0.97	0.38	0.87	1.34	g4 IV	1.46	4890
1013	4 19 23.2	+58 12 10	18.20	3.54		1.92:	0.94	0.40	0.80	1.26	f3 V-III	2.09	3880
1014	4 19 23.3	+58 19 15	15.39	3.22	2.52	1.77	0.84	0.32	0.75	1.11	f6 IV	1.47	1860
1015	4 19 23.4	+58 19 40	17.43	3.59	2.64	1.74	0.85	0.30	0.69	1.08	a8 V	2.19	3750
1016	4 19 23.6	+58 17 02	16.49		3.76	2.66	1.20	0.47	1.08	1.72	g9.5 IV	2.01	1890
1017	4 19 23.6	+58 05 21	12.55	2.92	2.27	1.53	0.70	0.28	0.65	0.90	f2 V	1.25	457
1018	4 19 23.7	+58 07 46	13.29	5.27	4.41	3.05	1.27	0.49	1.15	1.79			
1019	4 19 23.9	+58 15 06	15.89	4.45	3.69	2.62	1.18	0.43	1.06	1.65	g6 III	1.93	4160
1020	4 19 24.0	+58 09 39	16.49	3.56	2.67	1.61	0.77	0.28	0.66	0.97	a4 V-IV	2.21	3430
1021	4 19 24.1	+58 13 50	18.20	3.41		1.87:	1.07	0.36	0.80	1.28			

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
1022	4 19 24.2	+58 21 40	17.81	3.52	2.88:	2.05	0.96	0.34	0.86	1.34	g0 IV	1.66	4680
1023	4 19 24.2	+58 18 55	18.43		2.57:	1.69:	0.80	0.32	0.72	1.21			
1024	4 19 24.3	+58 22 46	16.06	3.41	2.57	1.75	0.85	0.34	0.73	1.13	f0 V	1.99	1880
1025	4 19 24.3	+58 04 43	17.36			2.10	0.94	0.35	0.94	1.41	g3 V	1.63	1590
1026	4 19 24.5	+58 15 41	15.79	4.47	3.66	2.63	1.19	0.43	1.07	1.66	g6 III	1.94	3940
1027	4 19 24.6	+58 04 59	18.01			2.42:	1.05	0.38	1.07	1.64	g2.5 III	1.92	
1028	4 19 24.6	+58 24 24	16.71	3.48	2.63	1.83	0.93	0.31	0.80	1.25	f1 V	2.09	2260
1029	4 19 24.6	+58 16 55	16.32	3.60	2.66	1.63	0.79	0.30	0.64	1.00	a4 V-IV	2.22	3160
1030	4 19 24.7	+58 20 35	17.89	3.34	2.72:	1.90	0.90	0.34	0.80	1.20	g0 IV	1.35	5580
1031	4 19 24.7	+58 04 16	17.40		2.45:	1.68	0.83	0.33	0.70	1.07	f1 V-IV	1.75	3640
1032	4 19 24.7	+58 07 24	16.22		2.67	1.89	0.91	0.34	0.85	1.27	f3 V	2.03	1600
1033	4 19 24.7	+58 28 34	16.32	3.66	2.69	1.79	0.87	0.35	0.74	1.14	f1 III	1.92	3710
1034	4 19 24.9	+58 20 45	18.04	3.46		1.86:	0.92	0.36	0.79	1.35:	f3 V	1.99	3770
1035	4 19 25.0	+58 29 03	12.71	6.75	5.70	4.13	1.64	0.74	1.48	2.45	k5.5 III	2.26	1160
1036	4 19 25.1	+58 19 06	15.70	3.61	2.67	1.71	0.79	0.30	0.68	1.07	a6 V	2.20	2000
1037	4 19 25.1	+58 26 57	18.27:			1.84:	0.91:	0.36:	0.85:	1.26:			
1038	4 19 25.1	+58 11 14	14.56	3.17	2.49	1.74	0.83	0.31	0.74	1.08	f6 IV	1.41	1310
1039	4 19 25.4	+58 07 09	16.87		3.54:	2.54	1.13	0.41	1.09	1.69	g5 III	1.88	6550
1040	4 19 25.4	+58 07 04	16.65			2.95	1.29	0.48	1.18	1.85	g8.5 III	2.31	5190
1041	4 19 25.5	+58 15 54	18.02	3.48	2.66:	1.80	0.94	0.34	0.77	1.23			
1042	4 19 25.6	+58 07 37	15.08	4.14	3.33	2.36	1.05	0.40	1.00	1.51			
1043	4 19 25.9	+58 16 50	16.45	3.61	2.63	1.60	0.80	0.29	0.63	1.01	a1.5 V	2.44	3830
1044	4 19 26.0	+58 16 03	15.69	3.61	2.61	1.61	0.79	0.29	0.66	1.00	a4 IV	2.18	3040
1045	4 19 26.2	+58 17 05	17.99	3.55	2.63:	1.75	0.90	0.32:	0.79	1.30			
1046	4 19 26.2	+58 23 49	17.59		2.79	1.98	1.07	0.38	0.82	1.29			
1047	4 19 26.3	+58 11 05	18.00		2.89::	2.07	1.03	0.40	0.88	1.35	f2 V-III	2.50	3170
1048	4 19 26.5	+58 06 35	18.36			2.01:	0.87	0.36	0.87	1.32:	g7 V	1.12	2410
1049	4 19 26.6	+58 04 59	17.92			1.88	0.82	0.26	0.70	1.05			
1050	4 19 26.6	+58 04 35	16.47	2.96:	2.19	1.24	0.61	0.24	0.50	0.74	a1.5 V	1.59	5710
1051	4 19 26.7	+58 04 03	14.99			3.85	1.53	0.64	1.38	2.25	k4 III	2.20	3020
1052	4 19 26.7	+58 05 53	17.68		2.56:	1.70	0.82	0.28	0.78	1.16	a9 V-III	2.04	4050
1053	4 19 26.7	+58 27 02	16.87	3.43:	2.59	1.77	0.85	0.32	0.80	1.23	f5 III	1.55	4820
1054	4 19 26.9	+58 16 03	14.50	5.04	4.20	2.99	1.29	0.49	1.12	1.80	k0 III	2.10	2190
1055	4 19 27.0	+58 24 06	18.25			1.95:	1.01:	0.32:	0.95:	1.43:	f2:	2.36	
1056	4 19 27.0	+58 08 56	18.36			1.76:	0.88	0.30	0.82	1.23	f2 V-III	1.93	4860
1057	4 19 27.0	+58 11 09	18.19			2.29:	1.01	0.40	1.05	1.61	g5.5 V	1.97	1690
1058	4 19 27.3	+58 15 33	17.41	3.41:	2.68	1.90	0.95	0.37	0.79	1.27	f5 IV	1.88	4050
1059	4 19 27.4	+58 05 00	15.37		4.24:	2.98	1.26	0.50	1.15	1.83	k1 III	1.79	3760
1060	4 19 27.4	+58 15 26	16.59	3.49	2.60	1.65	0.81	0.31	0.69	1.08	a7 V	2.08	2900
1061	4 19 27.6	+58 09 35	15.61	4.41	3.62	2.55	1.17	0.43	1.06	1.64	g6 III	1.83	3830
1062	4 19 27.9	+58 19 35	17.53	3.51	2.55	1.63	0.82	0.30	0.69	1.07	a7 IV	2.01	6090
1063	4 19 27.9	+58 10 39	15.80	3.52:	2.67	1.74	0.85	0.31	0.72	1.08	a7 V	2.22	1880
1064	4 19 28.1	+58 13 58	11.17	2.65	2.16	1.46	0.61	0.24	0.62		g4 V	0.13	170
1065	4 19 28.2	+58 09 51	18.26	4.02		2.44:	1.05	0.40	0.98:	1.36	g5 III	1.49	
1066	4 19 28.3	+58 23 18	17.19	3.53:	2.73	1.99	1.01	0.37	0.89	1.35	f4 V	2.14	2210
1067	4 19 28.4	+58 18 34	15.78	4.39	3.58	2.58	1.17	0.44	1.04	1.67	g5 III	1.95	3860
1068	4 19 28.6	+58 20 00	17.95	3.55:	2.74:	1.91	0.95	0.34	0.83	1.30	f1 V	2.27	3680
1069	4 19 28.6	+58 19 10	15.88	3.48	2.63	1.80	0.88	0.33	0.79	1.24	f0 V	2.12	1630
1070	4 19 28.9	+58 19 33	16.23	3.31	2.52	1.71	0.85	0.30	0.74	1.14	f1 V	1.83	2040
1071	4 19 28.9	+58 20 48	17.50	3.48	2.69	1.83	0.92	0.34	0.81	1.28	f0 V	2.21	3300
1072	4 19 29.0	+58 04 32	17.28			1.64	0.76	0.29	0.66	1.00	a8 V-III	1.91	3990
1073	4 19 29.0	+58 12 06	17.82	3.58	2.67:	1.99	0.98	0.35	0.88	1.37			
1074	4 19 29.0	+58 19 49	17.08	4.22	3.60:	2.54	1.12	0.44	1.02	1.58	g9.5 IV	1.64	2940
1075	4 19 29.0	+58 22 49	18.32			2.30:	0.96	0.44	0.91	1.44	k1 V	1.22	1580
1076	4 19 29.4	+58 12 18	17.03	3.55	2.68	1.64	0.79	0.30	0.63	1.00	a4 V-III	2.22	4390
1077	4 19 29.6	+58 22 11	17.76			3.05:	1.28	0.70	1.33	2.11	m2 V	0.57	286
1078	4 19 29.6	+58 15 35	18.22	3.32		1.94:	0.93	0.35	0.87	1.34	g0 V	1.52	3020
1079	4 19 29.9	+58 12 28	17.28	3.56:	2.66	1.78	0.86	0.30	0.76	1.17	f0 IV	2.09	4160
1080	4 19 30.0	+58 18 48	15.19	4.57	3.78	2.69	1.19	0.44	1.06	1.69	g8 III	1.82	3270
1081	4 19 30.0	+58 06 51	18.01			2.09:	0.95	0.33	0.94	1.42	g0 V-IV	1.81	2400
1082	4 19 30.2	+58 26 03	18.19			1.85:	0.86:	0.34:	0.82:	1.18	f9.5 V-III	1.34	3340
1083	4 19 30.3	+58 21 01	16.58	2.88	2.13	1.30	0.62	0.26	0.54	0.74	a8 V	1.17	4040
1084	4 19 30.4	+58 14 57	16.77	3.53:	2.63	1.62	0.77	0.29	0.63	0.98	a4 V	2.17	3980
1085	4 19 30.4	+58 24 05	18.01		2.81:	1.77	0.82:	0.28	0.83	1.25	a3 V-III:	2.68	6120

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
1086	4 19 30.5	+58 14 12	16.36	3.61	2.62	1.61	0.78	0.29	0.63	1.01	a4 V	2.19	3260
1087	4 19 30.5	+58 26 39	18.18			1.66:	0.67:	0.19:	0.68:	1.11	g2.5 III	0.15	
1088	4 19 30.5	+58 27 51	15.19	4.34	3.54	2.55	1.19	0.43	1.08	1.69	g4 IV	2.49	880
1089	4 19 30.6	+58 14 39	17.85	3.01	2.27:	1.42	0.63	0.26	0.71	1.10	f4 III	0.90	
1090	4 19 30.7	+58 16 20	17.97			2.31	1.08	0.44	0.93	1.44	g7 V	1.78	1480
1091	4 19 31.2	+58 16 50	16.53	3.57	2.69	1.81	0.90	0.33	0.80	1.25	a9 V	2.26	2160
1092	4 19 31.4	+58 12 01	15.79	3.60	2.64	1.65	0.80	0.29	0.70	1.07	a5 V-IV	2.18	2300
1093	4 19 31.7	+58 17 40	16.12	4.45	3.60	2.58	1.17	0.44	1.05	1.66			
1094	4 19 31.7	+58 11 04	17.33	4.30		2.59	1.17	0.43	1.09	1.64	g3 III	2.19	6810
1095	4 19 31.8	+58 18 34	15.88	3.52	2.57	1.55	0.75	0.28	0.63	0.99	a3 IV	2.13	3720
1096	4 19 31.9	+58 28 46	15.26	3.25	2.46	1.69	0.80	0.31	0.69	1.09	f2 IV	1.59	1880
1097	4 19 31.9	+58 20 18	17.24	3.29	2.54	1.83	0.87	0.31	0.80	1.19	f4 V	1.75	2710
1098	4 19 31.9	+58 04 10	15.89		3.76	2.79	1.14	0.57	1.34	2.18	m2 V:	0.02	156
1099	4 19 31.9	+58 20 54	16.99	3.45	2.60	1.62	0.77	0.30	0.66	1.01	a5 V	2.06	4230
1100	4 19 32.0	+58 13 49	16.68	3.71:	2.71	1.70	0.80	0.27	0.69		a3 V-III	2.44	3700
1101	4 19 32.1	+58 26 42	18.30:			1.59:	0.69:	0.27:	0.60:	0.94:	g2.5	0.42	
1102	4 19 32.1	+58 15 06	18.16	3.65		2.03:	0.97	0.37	0.90	1.38:	f3 V	2.31	3440
1103	4 19 32.1	+58 10 30	12.15	4.02	3.31	2.36	1.06	0.40	0.96	1.43	g7 IV	1.67	302
1104	4 19 32.1	+58 28 07	16.46		4.09:	2.93	1.29:	0.50	1.13	1.78	g9.5 III	2.07	5390
1105	4 19 32.2	+58 18 40	17.62		2.63	1.65	0.81	0.30	0.74	1.14	a6 V-III	2.21	4810
1106	4 19 32.2	+58 13 53	16.55	3.84	3.10	2.17	1.00	0.37	0.94	1.39	g4 IV	1.68	2390
1107	4 19 32.3	+58 21 24	14.86	4.70	3.93	2.77	1.20	0.47	1.09	1.70	g9.5 III	1.73	3030
1108	4 19 32.4	+58 06 20	17.65			1.70	0.85	0.29	0.83	1.25	f2 V-III	1.81	3700
1109	4 19 32.4	+58 15 58	17.08	3.49	2.69	1.87	0.94	0.34	0.82	1.27	f2 V	2.10	2480
1110	4 19 32.5	+58 08 23	17.46		2.58:	1.49	0.73	0.24	0.65	0.88	a2 V-III	2.22	6430
1111	4 19 32.6	+58 20 06	18.01	3.41	2.71:	1.95	0.93	0.37	0.86	1.28	f9.5 V	1.61	2710
1112	4 19 32.7	+58 05 16	17.51		2.68:	1.99:	0.88	0.28	0.90	1.36	g0 V	1.54	2160
1113	4 19 32.7	+58 11 08	18.23	3.50		1.92	0.95	0.32	0.91	1.37	f4 V	2.09	3640
1114	4 19 33.0	+58 13 56	15.99	3.69	2.70	1.77	0.88	0.32	0.77	1.22	f0 III	2.03	3250
1115	4 19 33.1	+58 18 26	17.94		2.59:	1.77	0.93	0.37	0.74	1.22	b8 V	3.27	8570
1116	4 19 33.2	+58 10 22	15.59	3.32	2.59	1.85	0.93	0.34	0.82	1.21	f6 V	1.70	1110
1117	4 19 33.3	+58 08 20	17.21		2.53	1.62	0.78	0.27	0.72	0.97	a8 V-III	1.97	3750
1118	4 19 33.3	+58 24 23	18.10			2.14:	1.06:	0.34	1.03:	1.57			
1119	4 19 33.4	+58 18 30	17.51	3.42:	2.69	1.86	0.96	0.38	0.79	1.26	f1 V	2.17	3150
1120	4 19 33.5	+58 22 40	16.88	3.67:	2.92	2.05	1.00	0.41	0.83	1.33	g0 IV	1.75	2920
1121	4 19 33.6	+58 25 30	17.72		2.77:	1.97:	1.02:	0.38	0.82:	1.26			
1122	4 19 33.6	+58 16 40	17.69	3.51	2.60:	1.70	0.87	0.32	0.72	1.17			
1123	4 19 33.6	+58 07 40	17.32			2.54	1.01	0.46	1.05	1.52	k2.2 V	1.43	770
1124	4 19 33.6	+58 10 38	16.92	3.99	3.22	2.33	1.02	0.39	1.01	1.55	g3 III	1.66	7190
1125	4 19 33.8	+58 26 19	17.30	3.51:	2.52:	1.64	0.84:	0.30	0.72	1.07			
1126	4 19 34.1	+58 15 19	17.02	3.56	2.69	1.75	0.87	0.34	0.69	1.11	a7 V	2.23	3300
1127	4 19 34.2	+58 17 51	17.58	3.41:	2.65	1.72	0.87	0.34	0.68	1.12	a8 V	2.14	4110
1128	4 19 34.3	+58 16 04	16.75	4.77	3.87:	2.80	1.26	0.48	1.12	1.78	g7 III	2.21	5520
1129	4 19 34.4	+58 10 08	17.47	3.48	2.78	1.91	0.94	0.38	0.84	1.25			
1130	4 19 34.4	+58 15 38	18.03	3.61		1.93	0.98	0.35	0.88	1.37	f2 V	2.29	3530
1131	4 19 34.6	+58 22 49	17.84		2.66:	1.98	0.84	0.38	0.81	1.28	g8 V:	0.81	2020
1132	4 19 34.7	+58 17 43	15.01	3.21	2.44	1.68	0.82	0.30	0.73	1.10	f2 V	1.66	1170
1133	4 19 34.8	+58 19 46	16.24	3.52	2.72	1.92	0.94	0.35	0.82	1.27	f2 V	2.16	1650
1134	4 19 34.8	+58 22 01	18.11	4.30:		2.42:	1.05	0.44	1.03	1.60	k0.7 V:	1.69	1180
1135	4 19 35.0	+58 28 33	16.09	3.31	2.53	1.77	0.89	0.35	0.77	1.26	f3 V	1.78	1690
1136	4 19 35.0	+58 06 07	17.19		2.65:	1.91	0.93	0.32	0.89	1.35	f4 V	2.02	2340
1137	4 19 35.3	+58 15 17	17.55		2.67	1.74	0.89	0.34	0.70	1.13	b9.5 V	2.97	6380
1138	4 19 35.3	+58 18 11	16.61	3.64:	2.89	2.08	0.95	0.35	0.90	1.35	f9.5 IV	1.81	2540
1139	4 19 35.5	+58 10 00	14.14	3.04	2.37	1.62	0.76	0.29	0.70	1.01	f3 V	1.39	820
1140	4 19 35.9	+58 10 04	17.95		2.68:	1.78	1.00:	0.39	0.82	1.28			
1141	4 19 36.1	+58 22 59	18.16		2.74::	2.06:	1.00:	0.34	0.90:	1.37	f7 V	1.96	2980
1142	4 19 36.2	+58 05 16	14.22	3.12	2.36	1.52	0.71	0.28	0.66	0.96	a9 V	1.57	1020
1143	4 19 36.3	+58 26 37	15.83	4.58:	3.80	2.64	1.20	0.47	1.07	1.67	g9 III	1.64	4890
1144	4 19 36.6	+58 08 44	18.00			1.77	0.92	0.31	0.84	1.13			
1145	4 19 36.8	+58 16 41	16.47	3.93	3.37	2.32	0.96	0.44	0.91	1.35	k1.7 V	1.12	640
1146	4 19 36.8	+58 15 22	14.22	3.65	2.67	1.68	0.80	0.30	0.68	1.05	a5 V	2.24	1090
1147	4 19 36.8	+58 07 14	17.62		2.44:	1.72	0.86	0.29	0.82	1.24	f4 V	1.66	3350
1148	4 19 36.8	+58 11 58	18.15	3.60		2.07:	0.93	0.33	0.93	1.42	g3 V	1.60	2310
1149	4 19 37.3	+58 22 51	17.74		2.75:	1.97	0.90:	0.30	0.88	1.36			

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U−V mag	P−V mag	X−V mag	Y−V mag	Z−V mag	V−S mag	V−I mag	Photom. sp. type	Av mag	d pc
1150	4 19 37.5	+58 27 35	17.41		2.85:	2.10:	0.97:	0.39	0.95	1.39	g1.5 V	1.72	1710
1151	4 19 37.5	+58 23 28	12.95	6.04	5.08	3.57	1.48	0.61	1.33	2.13	k3 III	2.28	1080
1152	4 19 37.6	+58 11 11	16.68	3.45	2.54	1.60	0.77	0.28	0.69	1.03	a7 V-IV	1.99	3140
1153	4 19 37.7	+58 06 06	15.00	3.28	2.58	1.80	0.87	0.32	0.81	1.21	f6 IV	1.59	1470
1154	4 19 38.2	+58 26 57	17.69		2.57:	1.61	0.82:	0.25	0.72:	1.09	a0 V-III	2.63	7460
1155	4 19 38.2	+58 21 00	17.67	3.43	2.56	1.82	0.93	0.32	0.81	1.26			
1156	4 19 38.4	+58 09 03	14.09	3.02	2.42	1.70	0.75	0.28	0.73	1.01	g3 V	0.74	530
1157	4 19 38.5	+58 23 42	15.59	3.55	2.71	1.89	0.94	0.35	0.84	1.28	f1 V	2.22	1270
1158	4 19 38.6	+58 14 55	17.58	3.59	2.67	1.74	0.84	0.31	0.72	1.07	a7 V	2.24	4230
1159	4 19 38.7	+58 07 53	18.42			1.85:	0.90	0.35	0.85	1.21:			
1160	4 19 38.9	+58 20 02	14.97	4.70	3.97	2.75	1.16	0.47	1.06	1.62	k1 IV	1.51	1180
1161	4 19 39.1	+58 15 17	15.98	3.47	2.61	1.82	0.89	0.31	0.81	1.26	f1 V	2.06	1640
1162	4 19 39.3	+58 14 51	18.22			1.67:	0.83	0.30	0.72	1.11:	a9	2.00	
1163	4 19 39.3	+58 23 25	17.96:			1.94:	0.98:	0.31	0.91:	1.45	f2 V-III	2.28	3430
1164	4 19 39.3	+58 05 30	18.36:			1.77:	0.78:	0.27:	0.87	1.36:	g0 V-III:	1.29	3580
1165	4 19 39.5	+58 04 01	15.88		2.81	1.99	0.98	0.39	0.85	1.35	f3 IV	2.24	1800
1166	4 19 39.6	+58 19 41	17.47	3.34	2.49	1.60	0.80	0.31	0.69	1.03	a8 V	1.89	4380
1167	4 19 39.7	+58 28 37	17.31		2.69:	1.83:	0.94:	0.38	0.85:	1.29			
1168	4 19 39.8	+58 04 14	17.47			1.71	0.84	0.34	0.75	1.13	f3	1.64	
1169	4 19 39.9	+58 25 20	17.66:	3.25::	2.63:	1.72:	0.80:	0.29:	0.80:	1.24:			
1170	4 19 40.2	+58 09 07	18.34			2.35:	1.00	0.44	1.01	1.41	k1 V	1.45	1440
1171	4 19 40.5	+58 18 04	16.76	3.43	2.53	1.58	0.75	0.29	0.60	0.95	a5 V	1.95	4010
1172	4 19 40.5	+58 27 13	15.06	5.22:	4.39	3.06	1.29	0.52	1.19	1.85	k1.2 III	1.92	3110
1173	4 19 40.7	+58 23 35	16.92			2.81	1.28	0.50	1.13	1.80	g8 IV	2.54	1810
1174	4 19 40.7	+58 23 59	18.13		2.51:	1.70	0.85:	0.34:	0.82:	1.19			
1175	4 19 41.1	+58 11 45	16.61	3.66	2.95	2.11	1.00	0.36	0.92	1.39	g0 IV	1.84	2480
1176	4 19 41.2	+58 05 27	17.99			2.14:	1.00	0.40:	0.92	1.35:			
1177	4 19 41.3	+58 18 28	17.93	3.39	2.65:	1.92	0.93	0.33	0.87	1.29	f6 V	1.83	3070
1178	4 19 41.7	+58 10 32	16.56	5.12		3.01	1.27	0.48	1.19	1.81	k0.5 III	2.02	5870
1179	4 19 42.0	+58 06 39	17.55			2.11:	0.99	0.38	0.90	1.41:	g1.5 V	1.74	1800
1180	4 19 42.0	+58 16 57	15.97	3.19	2.44	1.69	0.83	0.31	0.73	1.11	f2 V	1.64	1840
1181	4 19 42.3	+58 13 14	17.15	3.35	2.72	1.90	0.94	0.35	0.84	1.32	g0 IV	1.43	3850
1182	4 19 42.3	+58 05 32	15.34	3.22	2.65	1.86	0.83	0.32	0.80	1.16	g5 V	0.99	740
1183	4 19 42.5	+58 16 54	17.46	3.37:	2.63	1.86	0.87	0.34	0.77	1.20	f6 IV	1.65	4450
1184	4 19 42.6	+58 24 15	16.60	3.25	2.48	1.64	0.82	0.27	0.78	1.13	f0 V	1.82	2600
1185	4 19 42.6	+58 16 11	18.10:	: 3.57	2.75:	1.95	0.96	0.40	0.85	1.34	f3 V	2.17	3570
1186	4 19 42.6	+58 09 10	17.61			2.86:	1.15	0.60	1.25	1.71	m2 V	0.11	331
1187	4 19 42.6	+58 14 18	17.59	3.45	2.65	1.84	0.92	0.34	0.80	1.25	f2 V	2.03	3260
1188	4 19 42.8	+58 18 02	13.38	2.88	2.32	1.63	0.71	0.27	0.68	0.91	g2 V	0.59	435
1189	4 19 43.1	+58 20 29	18.19			2.57:	1.09	0.54	1.07	1.63	k2.5 V	1.56	1060
1190	4 19 43.2	+58 10 18	16.17	3.35	2.48	1.53	0.73	0.26	0.68	0.97	a6 IV	1.82	3790
1191	4 19 43.3	+58 13 36	18.11	3.28		1.89	0.94	0.33	0.88	1.35	f6 V	1.76	3430
1192	4 19 43.4	+58 09 17	13.42	3.03	2.26	1.24	0.56	0.21	0.47	0.65	a3 IV	1.41	1670
1193	4 19 43.6	+58 21 54	16.09	3.49	2.55	1.53	0.71	0.30	0.62	0.97	a3 IV	2.07	4200
1194	4 19 43.8	+58 08 41	17.37		2.60	1.92	0.90	0.34	0.87	1.16	g0 V	1.45	2110
1195	4 19 44.0	+58 05 55	15.28	3.32	2.63	1.87	0.90	0.34	0.83	1.23	f6 IV	1.70	1590
1196	4 19 44.0	+58 24 35	15.68	4.68:	3.88	2.65	1.14	0.50	1.05	1.57	k0.7 IV:	1.59	1580
1197	4 19 44.0	+58 21 04	18.15	3.29	2.45:	1.75	0.86	0.33	0.78	1.24	f3 V:	1.73	4460
1198	4 19 44.1	+58 10 39	17.74	3.30	2.55	1.77	0.85	0.31	0.82	1.16	f2 V	1.83	3810
1199	4 19 44.7	+58 12 31	17.63			3.16	1.19	0.67	1.30	1.96	k6 V	1.42	530
1200	4 19 44.8	+58 28 13	17.79			1.90:	0.90:	0.38:	0.80:	1.19:	g1.5	1.30	
1201	4 19 44.8	+58 08 30	15.89	3.11	2.40	1.68	0.82	0.29	0.76	1.09	f3 V	1.53	1730
1202	4 19 44.8	+58 24 49	17.94:		2.42:	1.69:	0.69:	0.24:	0.88:	1.28:	g5.5 V:	0.58	2850
1203	4 19 45.0	+58 22 13	16.06	3.51	2.55	1.54	0.75	0.32	0.61	0.97	a1.5 V	2.29	3430
1204	4 19 45.2	+58 09 03	17.13	3.37:	2.59	1.76	0.89	0.32	0.82	1.10	f1 V	2.02	2830
1205	4 19 45.2	+58 08 37	18.24			2.36:	1.06	0.38	1.07	1.46	g2.5 III	1.92	
1206	4 19 45.3	+58 12 16	17.85		2.48:	1.80	0.88	0.31	0.83	1.27	f5 V	1.67	3440
1207	4 19 45.3	+58 17 56	18.00	3.32	2.56:	1.80	0.88	0.36	0.79	1.20	f3 V	1.81	4010
1208	4 19 45.6	+58 21 39	16.55	3.53:	2.96	2.09	0.95	0.40	0.88	1.31	g7 V	1.30	960
1209	4 19 45.7	+58 08 37	18.29			1.82:	0.97	0.36	0.82	1.11:			
1210	4 19 45.8	+58 20 21	17.92		2.64:	1.94	0.97	0.37	0.83	1.29	f5 V	1.95	3130
1211	4 19 46.0	+58 23 45	18.26			1.84:	0.97:	0.38:	0.78:	1.22	b9 V	3.35	8010
1212	4 19 46.0	+58 14 51	16.96	3.62	2.69	1.70	0.79	0.29	0.67	1.04	a5 V	2.21	3900
1213	4 19 46.2	+58 14 17	16.99	3.53	2.69	1.92	0.92	0.33	0.84	1.28	f2 V	2.14	2340

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U−V mag	P−V mag	X−V mag	Y−V mag	Z−V mag	V−S mag	V−I mag	Photom. sp. type	Av mag	d pc
1214	4 19 46.2	+58 21 38	16.52	3.41	2.59	1.63	0.80	0.32	0.70	1.07	a7 V	2.04	2850
1215	4 19 46.3	+58 08 18	18.09:			1.79:	0.79	0.26	0.89	1.18:	g0 V:	1.26	3200
1216	4 19 46.5	+58 22 44	18.30			1.83:	0.93:	0.28	0.77:	1.25	a3 V-III	2.79	6630
1217	4 19 46.6	+58 05 36	17.78:			1.98:	0.97:	0.39	0.78	1.14:	a5 V	2.87	4190
1218	4 19 46.7	+58 21 51	17.07		3.11:	2.24	0.94	0.42	0.95	1.39	g9.5 V	1.31	980
1219	4 19 46.7	+58 24 43	15.44	4.56	3.94	2.75	0.99	0.63	1.06	1.50	k5.5 V	0.69	295
1220	4 19 46.8	+58 23 58	14.07	4.29	3.51	2.42	1.10	0.40	1.02	1.55			
1221	4 19 46.8	+58 05 19	17.64			2.38:	1.08	0.49	0.99	1.51	g9 V	1.79	1070
1222	4 19 47.1	+58 08 22	18.29			1.76:	0.79	0.31	0.89	1.10:			
1223	4 19 47.4	+58 18 09	17.62		2.52	1.60	0.81	0.33	0.70	1.09			
1224	4 19 47.4	+58 19 51	16.82	3.23	2.44	1.71	0.85	0.33	0.75	1.12	f3 V	1.63	2530
1225	4 19 47.6	+58 22 48	17.03		3.21:	2.25	1.01	0.39	0.98	1.48	g6 IV	1.64	2970
1226	4 19 47.6	+58 08 45	17.65		2.55:	1.80	0.91	0.33	0.82	1.11	f3 V	1.89	3300
1227	4 19 47.7	+58 22 25	17.80		2.61:	1.87:	0.99	0.35	0.87:	1.31			
1228	4 19 47.8	+58 22 38	17.93		2.73:	1.97:	0.97:	0.31	0.91:	1.41	f4 V	2.13	3120
1229	4 19 48.0	+58 06 10	16.94		2.59	1.86	0.90	0.33	0.82	1.22	f6 V	1.68	2090
1230	4 19 48.0	+58 24 31	17.84		2.60:	1.73:	0.89:	0.37	0.75:	1.12			
1231	4 19 48.0	+58 17 13	17.30	3.31:	2.65	1.91	0.90	0.35	0.82	1.25	f9.5 V	1.47	2090
1232	4 19 48.1	+58 25 30	17.75		2.62:	1.79:	0.87:	0.38	0.74:	1.12	f0 V	2.09	3900
1233	4 19 48.3	+58 11 39	18.13			2.25:	1.01	0.44	0.96	1.49	g8.5 V	1.56	1560
1234	4 19 48.5	+58 21 05	18.34		2.45:	1.81:	0.87	0.32	0.81	1.25	f7 V-III	1.47	4060
1235	4 19 48.8	+58 22 19	17.82		2.55:	1.71:	0.79:	0.27	0.81:	1.17	f0 V-III	1.95	4290
1236	4 19 49.0	+58 10 20	18.38			1.72:	0.87	0.30	0.78	1.19:	f2 V-III	1.82	5160
1237	4 19 49.0	+58 12 02	16.57	3.53	2.84	2.01	0.95	0.35	0.86	1.30	g0 IV	1.62	2690
1238	4 19 49.0	+58 05 54	18.06			1.83:	0.82	0.27	0.89	1.27:	g0 V	1.30	3100
1239	4 19 49.3	+58 27 16	17.25	3.42:	2.50:	1.55	0.82:	0.30	0.65	1.02	a0 V	2.47	6550
1240	4 19 49.3	+58 23 11	17.10		3.25:	2.27	1.03	0.44	0.98	1.39	g8.5 V	1.64	940
1241	4 19 49.5	+58 08 45	18.09			2.40:	1.17	0.43	1.07	1.57	g0 V-III	2.59	1740
1242	4 19 49.5	+58 06 58	15.36	3.72	3.08	2.10	0.94	0.37	0.88	1.25	g7 IV	1.19	1660
1243	4 19 49.5	+58 16 29	17.36	3.56:	2.52	1.63	0.79	0.31	0.63	0.98			
1244	4 19 49.6	+58 07 41	18.29			2.01:	0.94	0.40	0.79	1.16			
1245	4 19 49.7	+58 15 02	18.43			1.73:	0.84	0.33	0.80:	1.25:	f3 V	1.69	5170
1246	4 19 49.8	+58 05 21	17.92			1.96:	0.95	0.34	0.84	1.30	f5 V	1.97	3090
1247	4 19 49.9	+58 11 44	17.79		2.88:	2.03	1.03	0.36	0.88	1.34	f1 V-III	2.56	2990
1248	4 19 50.0	+58 07 33	17.53		2.56:	1.80	0.89	0.35	0.77	1.14	f3 V	1.84	3200
1249	4 19 50.0	+58 11 02	18.30			2.27:	0.98	0.31	1.03	1.45	g5.5 III:	1.24	
1250	4 19 50.1	+58 22 31	15.23	3.28	2.79	1.90	0.83	0.35	0.80	1.11	g6 IV	0.76	1930
1251	4 19 50.3	+58 17 31	17.85			2.30	1.00	0.45	0.97	1.42	k0 V	1.46	1250
1252	4 19 50.3	+58 15 16	16.93		3.72:	2.67	1.08	0.55	1.06	1.63	k3 V	1.49	590
1253	4 19 50.3	+58 19 07	17.85	3.12:	2.58:	1.92	0.90	0.36	0.84	1.27	g3 V:	1.18	2440
1254	4 19 50.3	+58 23 18	16.04	4.39:	3.63	2.54	1.14	0.44	1.07	1.61	g9.5 IV	1.79	1700
1255	4 19 50.4	+58 16 27	18.06		2.63:	1.66:	0.83	0.35	0.65	1.03	a0.5 V	2.61	8310
1256	4 19 50.4	+58 13 40	17.68		2.64	1.82	0.84	0.29	0.83	1.26	f1 V-III	2.06	3590
1257	4 19 50.5	+58 17 35	15.67	3.67	3.11	2.13	0.86	0.41	0.86	1.20	k1.2 V	0.82	540
1258	4 19 50.6	+58 16 09	16.17	3.45	2.82	2.02	0.90	0.36	0.86	1.25	g5.5 V	1.26	920
1259	4 19 50.8	+58 10 20	15.63	3.94	3.41	2.35	0.90	0.44	0.94	1.32	k3 V	0.82	438
1260	4 19 50.8	+58 24 52	17.72		2.68:	1.97:	0.90:	0.42:	0.89:	1.27:			
1261	4 19 50.8	+58 15 08	16.36	3.29	2.54	1.81	0.87	0.31	0.84	1.26	f4 V	1.76	1790
1262	4 19 50.8	+58 17 26	15.84	3.46	2.79	1.99	0.91	0.36	0.83	1.22	g0 IV	1.52	2020
1263	4 19 50.9	+58 05 04	17.97			1.84:	0.94	0.39	0.82	1.23:	f3	2.01	
1264	4 19 50.9	+58 11 16	17.72			2.64	1.01	0.53	1.09	1.59	k3.5 V	1.27	870
1265	4 19 51.1	+58 24 48	17.44		2.95:	2.23:	1.02:	0.46	0.88	1.43			
1266	4 19 51.2	+58 05 56	17.62			1.67	0.79	0.30	0.74	1.12			
1267	4 19 51.3	+58 16 47	18.02		2.60:	1.79	0.91	0.39	0.71	1.16			
1268	4 19 51.5	+58 26 00	16.88	3.36:	2.64	1.91	0.92	0.36	0.82	1.19	f6 V	1.76	1940
1269	4 19 51.6	+58 07 04	17.85			1.88	0.93	0.34	0.83	1.26	f2 V	2.11	3530
1270	4 19 52.2	+58 07 14	14.67	2.95	2.29	1.57	0.74	0.27	0.69	0.97	f6 IV	1.06	1610
1271	4 19 52.5	+58 20 25	17.48		2.87:	2.05	0.90	0.37	0.91	1.31	g5.5 V	1.37	1610
1272	4 19 52.9	+58 17 44	18.28		2.64:	1.98:	1.04	0.41	0.79	1.31			
1273	4 19 53.0	+58 08 07	16.99		2.46:	1.73:	0.83	0.29	0.83	1.23:			
1274	4 19 53.1	+58 13 25	18.08			1.87	0.92	0.32	0.85	1.32			
1275	4 19 53.3	+58 05 23	17.78			1.61	0.79	0.31	0.69	1.05	f3	1.40	
1276	4 19 53.4	+58 10 22	16.15	3.76	3.01	2.19	1.01	0.38	0.94	1.43	f9.5 IV	2.03	1850
1277	4 19 53.6	+58 26 53	16.92	3.66:	2.82:	2.04	1.01	0.41	0.86	1.29	f5 IV	2.18	2800

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) o ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
1278	4 19 53.9	+58 20 58	13.19	3.15	2.58	1.79	0.77	0.31	0.76	1.02	g6 V	0.75	285
1279	4 19 53.9	+58 17 43	18.43			1.97:	0.85	0.35	0.92	1.32	g7 V	1.11	2490
1280	4 19 54.0	+58 14 11	17.78		2.50:	1.48	0.75	0.26	0.62	1.07	a2 V-III	2.17	7640
1281	4 19 54.2	+58 07 14	15.43	3.28	2.50	1.78	0.84	0.33	0.80	1.15	f3 V	1.74	1280
1282	4 19 54.4	+58 10 30	16.15		3.79	2.71	1.21	0.44	1.12	1.74	g6 III	2.13	4260
1283	4 19 54.7	+58 18 31	14.90	4.39	3.61	2.59	1.14	0.43	1.03	1.60	g6 III	1.82	2770
1284	4 19 54.7	+58 21 53	17.10	3.46:	2.80:	1.98	0.96	0.35	0.88	1.33			
1285	4 19 54.9	+58 24 59	17.15			2.58	1.06:	0.60	1.04	1.47	k4.5 V:	0.81	720
1286	4 19 54.9	+58 14 41	17.05	3.33:	2.66	1.88	0.88	0.33	0.80	1.20	g0 IV	1.32	3840
1287	4 19 54.9	+58 15 42	15.45	3.30	2.64	1.90	0.87	0.33	0.80	1.18	g1 V	1.31	870
1288	4 19 55.1	+58 19 29	17.62		2.58	1.76	0.92	0.37	0.75	1.16			
1289	4 19 55.2	+58 06 59	13.00	2.94	2.35	1.62	0.72	0.27	0.72	0.96	f9.5 IV	0.78	770
1290	4 19 55.3	+58 23 06	15.99	3.35	2.60	1.76	0.86	0.33	0.81	1.21	f1 V	1.96	1730
1291	4 19 55.4	+58 12 43	17.42			2.77	1.10	0.56	1.07	1.56	k3.5 V	1.50	680
1292	4 19 55.7	+58 06 51	17.74			2.20:	1.07	0.41	0.89	1.37	a6	3.28	
1293	4 19 55.8	+58 06 14	16.89		2.68	1.90	0.85	0.34	0.81	1.17	g5.5 V	1.03	1430
1294	4 19 55.9	+58 19 03	18.27		2.31:	1.84:	0.80:	0.33	0.83	1.29	g1.5 V::	1.00	3540
1295	4 19 56.0	+58 11 01	18.28			2.49:	1.03	0.49	1.08	1.58	k1.7 V	1.59	1180
1296	4 19 56.0	+58 19 19	17.97		2.35:	1.53	0.72	0.29	0.62	0.98	a9 V	1.57	5740
1297	4 19 56.1	+58 06 24	16.02	3.41:	2.48	1.48	0.70	0.26	0.64	0.93	a3 V-III	2.00	3330
1298	4 19 56.1	+58 17 52	17.86		2.67:	1.90	1.01	0.40	0.81	1.23			
1299	4 19 56.2	+58 09 49	14.28	4.99	3.97	2.94	1.32	0.47	1.21	1.88	g4 III:	2.92	1220
1300	4 19 56.2	+58 16 39	17.71		2.54	1.77	0.86	0.33	0.79	1.25	f2 V	1.86	3720
1301	4 19 56.4	+58 10 40	17.31	3.55:	2.60	1.58	0.74	0.28	0.60	0.90	a4 V	2.08	5330
1302	4 19 56.5	+58 21 51	17.46		2.65:	1.92	0.97	0.37	0.87	1.27			
1303	4 19 56.5	+58 16 31	17.54	3.27:	2.49	1.75	0.90	0.34	0.75	1.20			
1304	4 19 56.6	+58 19 06	16.79	3.64:	2.75	2.01	0.96	0.36	0.85	1.28	f4 V-IV:	2.16	1820
1305	4 19 56.6	+58 10 21	18.28			1.59:	0.79	0.28	0.67	1.01	a3 V-III	2.28	8330
1306	4 19 57.1	+58 26 10	17.77		2.55:	1.75:	1.06:	0.38:	0.78:	1.14:			
1307	4 19 57.2	+58 16 48	13.87	3.24	2.51	1.73	0.83	0.31	0.76	1.12	f2 V	1.74	670
1308	4 19 57.6	+58 24 03	16.95	3.32:	2.51	1.63	0.88	0.29	0.76	1.08			
1309	4 19 57.8	+58 17 19	16.46	3.51	2.67	1.85	0.92	0.35	0.81	1.23	f1 V	2.15	1960
1310	4 19 57.8	+58 23 42	18.00		2.42:	1.58:	0.79:	0.26:	0.77:	1.08:	a9	1.78	
1311	4 19 57.8	+58 26 26	17.88			2.85:	1.25:	0.50	1.12	1.79	k0 IV	2.24	3230
1312	4 19 57.9	+58 16 03	16.98	3.19:	2.52	1.79	0.88	0.33	0.80	1.22	f6 V	1.55	2250
1313	4 19 58.2	+58 22 28	17.94			2.08:	1.02:	0.43	0.95:	1.35	f3 V-III	2.48	2870
1314	4 19 58.2	+58 17 13	15.64	4.88:	4.02	2.84	1.24	0.47	1.11	1.75	g9.5 III	1.91	3980
1315	4 19 58.5	+58 09 23	16.67	3.39:	2.89	2.08	0.94	0.37	0.91	1.27			
1316	4 19 58.7	+58 06 39	15.66	3.11	2.39	1.53	0.74	0.28	0.68	1.02	a9 V	1.62	1940
1317	4 19 58.8	+58 06 58	15.62	2.59	1.94	1.12	0.58	0.23	0.51	0.70			
1318	4 19 58.8	+58 10 02	18.56			2.10:	0.92	0.38:	0.91	1.24	g7 V	1.36	2370
1319	4 19 58.9	+58 20 24	16.86	3.40:	2.62	1.85	0.89	0.34	0.80	1.20	f3 V	1.91	2270
1320	4 19 59.0	+58 17 21	17.71		2.57:	1.81	0.93	0.37	0.81	1.25			
1321	4 19 59.1	+58 08 54	18.05			1.86:	0.92	0.31	0.81	1.28:	f4 V-III	1.88	3700
1322	4 19 59.3	+58 24 56	16.24		4.00:	2.80	1.00	0.61	1.10	1.62	k5 V	0.93	418
1323	4 19 59.3	+58 16 13	17.39	3.25:	2.54	1.81	0.87	0.33	0.79	1.20	f6 V	1.57	2690
1324	4 19 59.4	+58 10 58	17.65		2.62	1.79	0.86	0.34	0.72	1.05	f0 V-IV	2.06	3780
1325	4 19 59.6	+58 09 59	16.52	3.36	2.70	1.94	0.90	0.32	0.88	1.27	f9 V	1.59	1430
1326	4 19 59.6	+58 17 02	16.85	3.50:	2.62	1.82	0.89	0.35	0.80	1.24	f5 III	1.65	4570
1327	4 19 59.8	+58 14 30	17.92		2.52:	1.87	0.87	0.35	0.87	1.32	g3 V-III:	1.16	2540
1328	4 19 59.8	+58 16 18	16.80	3.52	2.64	1.72	0.85	0.33	0.75	1.17	a9 IV	2.06	3530
1329	4 20 00.0	+58 15 58	17.28	3.33:	2.63	1.79	0.86	0.34	0.77	1.16	f1 V	1.98	3090
1330	4 20 00.4	+58 20 52	16.86	3.59:	2.67	1.64	0.79	0.33	0.66	0.98	a4 V	2.26	3990
1331	4 20 00.5	+58 23 11	17.97		2.50:	1.74	0.93:	0.28	0.84:	1.20			
1332	4 20 00.6	+58 25 30	16.07	3.89	3.06	2.14	0.99	0.40	0.89	1.31	f0 V:	2.81	1300
1333	4 20 00.7	+58 09 59	15.12	4.34	3.50	2.50	1.13	0.42	1.05	1.58			
1334	4 20 00.7	+58 11 18	18.29			1.73:	0.80	0.31	0.69:	1.04	f8	1.12	
1335	4 20 01.2	+58 23 44	16.64		3.66:	2.55	0.98	0.53	1.06	1.44	k3.5 V	1.05	580
1336	4 20 01.5	+58 13 32	17.80			1.91	0.96	0.35	0.84	1.25	f2	2.20	
1337	4 20 01.8	+58 11 11	16.77	3.37:	2.59	1.78	0.86	0.32	0.81	1.19	f1 V	1.99	2440
1338	4 20 01.8	+58 10 21	17.86			1.87	0.92	0.33	0.84	1.25	f2 V-III	2.10	3560
1339	4 20 01.8	+58 11 05	15.12	4.91:	4.08	2.84	1.24	0.47	1.12	1.72	k0.5 III	1.70	3510
1340	4 20 01.9	+58 21 27	17.64		2.75:	1.76	0.83	0.38	0.76:	1.20	a6 V	2.39	4470
1341	4 20 02.0	+58 26 19	13.15	3.23	2.53	1.71	0.79	0.33	0.69	0.98	f1 V	1.74	520

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) o ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
1342	4 20 02.1	+58 14 33	14.95	3.32	2.47	1.40	0.68	0.26	0.55	0.83	a1.5 V	2.02	2320
1343	4 20 02.1	+58 11 17	16.94			2.47	1.06	0.44	1.04	1.51	k0.7 V	1.69	690
1344	4 20 02.1	+58 16 00	17.50	3.49:	2.69	1.88	0.97	0.36	0.83	1.29	f2 V	2.15	2960
1345	4 20 02.6	+58 14 43	16.53			2.92	1.31	0.50	1.14	1.83	g8 III	2.33	4780
1346	4 20 02.6	+58 25 30	18.03:			1.82:	0.95:	0.40:	0.90:	1.27:			
1347	4 20 02.6	+58 14 04	16.95	3.09	2.26	1.28	0.67	0.25	0.53	0.81	a1.5 V	1.73	6660
1348	4 20 02.7	+58 10 16	16.49	3.95:	3.09	2.21	1.06	0.38	1.00	1.49	f7 III	2.31	2720
1349	4 20 02.7	+58 17 58	16.96	3.52:	2.90	2.04	0.96	0.38	0.90	1.35			
1350	4 20 03.2	+58 14 09	18.46			1.84:	0.98	0.37	0.78	1.30	b9 V	3.36	8710
1351	4 20 03.3	+58 08 41	16.10	2.78	2.05	1.11	0.58	0.20	0.49	0.69			
1352	4 20 03.3	+58 12 22	18.17			1.88:	1.01	0.35	0.87:	1.33			
1353	4 20 03.6	+58 25 26	16.93		3.10:	2.20	0.95	0.41	0.96	1.43	g8.5 V	1.42	960
1354	4 20 03.6	+58 13 47	17.50	3.25:	2.65	1.90	0.97	0.37	0.84	1.27			
1355	4 20 03.7	+58 07 57	15.66	3.41	2.69	1.89	0.92	0.34	0.83	1.23	f6 IV	1.79	1810
1356	4 20 04.0	+58 17 49	18.26			1.89:	0.93	0.35	0.87	1.29:			
1357	4 20 04.1	+58 12 34	14.96	2.22	1.75	1.09	0.58	0.23	0.50	0.65			
1358	4 20 04.2	+58 10 26	17.38		2.54	1.62	0.78	0.31	0.68	0.96			
1359	4 20 04.2	+58 10 48	17.37			2.28	0.98	0.37	0.99	1.41			
1360	4 20 04.3	+58 11 37	18.32			1.76:	0.85	0.33	0.78	1.20	f3 V	1.74	4800
1361	4 20 04.4	+58 20 14	18.05		2.63:	1.88:	0.79:	0.41:	0.84:	1.23	g8.5 V:	0.63	2320
1362	4 20 04.6	+58 19 44	16.50	3.10	2.26	1.26	0.66	0.27	0.51	0.76	a1.5 V	1.72	5450
1363	4 20 05.2	+58 21 11	17.86		2.55:	1.71	0.86:	0.31	0.84:	1.21			
1364	4 20 05.4	+58 19 19	18.49			2.00:	0.89	0.41	0.86	1.27	g9 V	0.99	2300
1365	4 20 05.6	+58 12 04	16.61	3.43:	2.64	1.71	0.84	0.32	0.77	1.13	a9 V	2.09	2430
1366	4 20 05.9	+58 11 41	15.96			3.01	1.29	0.49	1.19	1.87	k0 III	2.18	4140
1367	4 20 05.9	+58 16 36	18.38			1.85	0.97	0.37	0.81	1.28	b9 V	3.40	8250
1368	4 20 06.1	+58 21 38	17.11	3.50:	2.81:	2.04	0.95	0.36	0.94	1.37	g1.5 V	1.61	1560
1369	4 20 06.2	+58 24 28	15.51	4.90:	4.01:	2.75:	1.28	0.51	1.16	1.88	g9.5 III:	1.97	3640
1370	4 20 06.8	+58 22 47	17.43			2.74:	1.16:	0.58	1.51	2.54	m1 V::	0.49	337
1371	4 20 06.9	+58 11 50	17.11	3.22:	2.55	1.79	0.87	0.30	0.84	1.21	f7 IV	1.46	4010
1372	4 20 07.4	+58 11 51	17.14	3.26:	2.46	1.42	0.67	0.25	0.60	0.90	a3 IV	1.85	7570
1373	4 20 07.5	+58 24 32	17.73			2.49:	1.18:	0.35:	1.18:	1.77:			
1374	4 20 07.5	+58 10 38	16.36	3.45:	2.81	2.01	0.93	0.35	0.88	1.27	g3 V	1.46	1090
1375	4 20 07.8	+58 22 43	15.91	3.68	2.69	1.64	0.83	0.28	0.74	1.09	a3 V-III	2.41	2630
1376	4 20 08.4	+58 22 43	17.38		2.80:	1.98:	0.97	0.31	0.97	1.42	f2 V-III	2.37	2520
1377	4 20 08.6	+58 08 06	15.80		3.77	2.70	1.20	0.46	1.07	1.67	g7 III	1.95	4010
1378	4 20 08.7	+58 20 49	16.62		4.03:	2.87	1.33	0.52	1.21	1.90	g9.5 IV	2.53	1580
1379	4 20 08.7	+58 15 06	17.53	3.29:	2.57:	1.70	0.85	0.32	0.71	1.10	f0 V	1.93	3810
1380	4 20 09.1	+58 16 39	18.06			1.89:	0.91	0.36	0.81	1.22	f6	1.71	
1381	4 20 09.2	+58 24 33	16.49	3.12	2.26	1.36	0.76	0.31	0.60	0.86	b9.5 V	2.21	5560
1382	4 20 09.8	+58 10 50	17.55		2.50:	1.84	0.91	0.33	0.79	1.17	f5 V	1.70	2950
1383	4 20 09.9	+58 13 10	16.24	2.96	2.21	1.26	0.64	0.24	0.50	0.75	a5 V-III	1.31	4230
1384	4 20 10.1	+58 17 42	18.24			2.09:	0.93	0.40	0.87	1.30	g8 V	1.25	1980
1385	4 20 10.3	+58 19 40	17.17:		2.63:	1.55:	0.80:	0.29:	0.76::	1.23:	a1.5 V-III	2.49	5210
1386	4 20 10.4	+58 15 18	15.60	3.84	3.28	2.21	0.92	0.41	0.86	1.22	k0.5 IV	0.57	2440
1387	4 20 10.7	+58 22 33	15.68	3.74	2.74	1.67	0.84	0.28	0.81	1.25	a3 V-III	2.53	2240
1388	4 20 10.9	+58 15 32	18.64			2.08:	0.82:	0.38	0.80	1.21	k0.5 V	0.74	2400
1389	4 20 10.9	+58 09 00	18.30			1.81:	0.99	0.32	0.81	1.23:			
1390	4 20 11.0	+58 17 31	17.16		2.70	1.70	0.78	0.33	0.70	1.05	a5 V-III	2.26	4170
1391	4 20 11.0	+58 13 49	17.09		2.91	2.11	1.01	0.39	0.90	1.36			
1392	4 20 11.1	+58 16 57	17.37	3.31:	2.56	1.71	0.84	0.30	0.77	1.13	f0 V	1.96	3480
1393	4 20 11.5	+58 10 11	16.82	3.34:	2.45	1.52	0.71	0.26	0.65	0.97	a6 V	1.82	3970
1394	4 20 11.5	+58 16 58	16.11	3.41	2.52	1.45	0.70	0.25	0.62	0.91	a3 IV	1.98	4430
1395	4 20 11.9	+58 15 45	15.24	3.15	2.45	1.61	0.80	0.29	0.67	1.02	f3 III:	1.25	2780
1396	4 20 12.2	+58 08 52	17.65			2.12	1.02	0.34	0.95	1.45			
1397	4 20 12.8	+58 21 12	15.72	3.50	2.80	1.98	0.94	0.30	0.88	1.30	f9.5 IV	1.63	1830
1398	4 20 13.2	+58 20 09	17.04	3.72:	2.76	1.72	0.84	0.32	0.71	1.07	a4 V-III	2.44	3980
1399	4 20 13.2	+58 11 19	17.75			1.95:	0.96	0.36	0.85	1.26:	f3 V	2.17	3020
1400	4 20 13.3	+58 13 53	14.74	4.67	3.89	2.72	1.22	0.47	1.06	1.69	g9.5 III	1.67	2940
1401	4 20 14.0	+58 22 40	17.07	3.70:	2.91:	2.10:	0.99	0.37	0.98	1.41	f9 IV	1.98	2930
1402	4 20 14.4	+58 18 31	17.21		2.68	1.86	0.91	0.36	0.78	1.21	f1 V	2.14	2780
1403	4 20 14.4	+58 16 38	17.66		2.61:	1.69	0.87	0.36	0.71	1.09	b9.5 V	2.89	6950
1404	4 20 14.4	+58 18 17	17.67			2.00	1.01	0.42	0.80	1.25			
1405	4 20 14.4	+58 15 11	17.05	3.49:	2.60	1.83	0.89	0.35	0.80	1.21			

Table 3. Continued

No.	RA(2000) h m s	DEC(2000) ° ′ ″	V mag	U–V mag	P–V mag	X–V mag	Y–V mag	Z–V mag	V–S mag	V–I mag	Photom. sp. type	A_V mag	d pc
1406	4 20 14.6	+58 15 56	18.36			1.93:	0.85	0.36	0.86	1.26	g7 V	1.03	2500
1407	4 20 14.7	+58 21 15	16.97		2.82	1.81	0.88	0.34	0.80	1.24	a5 V-III	2.56	3310
1408	4 20 14.9	+58 10 35	17.21			2.10	0.95	0.37	0.89	1.31:	g5 V	1.53	1370
1409	4 20 14.9	+58 11 53	15.88	3.36	2.51	1.52	0.71	0.28	0.65	0.94	a5 V-III	1.88	2760
d1410	4 20 15.4	+58 12 22	17.18			2.24	1.00	0.42	0.90	1.29	g8.5 V	1.47	1050
1411	4 20 15.5	+58 10 06	16.29	3.42:	2.53	1.50	0.71	0.29	0.58	0.90	a1.5 V	2.17	4020
1412	4 20 15.8	+58 14 44	18.33			1.87:	0.85:	0.31:	0.89:	1.28:	g0 V-III	1.38	3390
1413	4 20 16.0	+58 16 01	16.36	4.08:	3.64	2.53	0.91	0.59	0.94	1.38	k5 V	0.29	600
1414	4 20 16.3	+58 19 16	17.14			2.84	1.21	0.51	1.19	1.84	k1.5 V	2.33	510
1415	4 20 16.8	+58 12 44	18.04			2.22:	1.01:	0.37:	0.93	1.36	g1.5 III	1.60	
1416	4 20 16.8	+58 10 57	15.27	3.67	2.94	2.13	1.01	0.47	0.91	1.44	g1 IV	1.77	1340
1417	4 20 17.6	+58 11 00	17.45			1.86	0.82:	0.38	0.85	1.24:	g7 V	0.87	1780
1418	4 20 18.2	+58 11 36	14.37	3.24	2.38	1.37	0.64	0.27	0.55	0.82	a3 IV	1.71	2250
1419	4 20 19.2	+58 13 43	17.86			1.72:	0.83	0.37	0.74	1.08	g7:	0.70	
1420	4 20 19.9	+58 12 15	17.31		2.61:	1.84	0.91	0.36	0.86	1.31:	f3 V	1.95	2740

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CHEMICAL COMPOSITION OF THE RS CVn-TYPE STAR LAMBDA ANDROMEDAE

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Abstract. Photospheric parameters and chemical composition are determined for the single-lined chromospherically active RS CVn-type star λ And (HD 222107). From the high resolution spectra obtained on the Nordic Optical Telescope, abundances of 22 chemical elements and isotopes, including such key elements as ^{12}C, ^{13}C, N and O, were investigated. The differential line analysis with the MARCS model atmospheres gives $T_{\rm eff}$ = 4830 K, $\log g$ = 2.8, [Fe/H] = −0.53, [C/Fe] = 0.09, [N/Fe] = 0.35, [O/Fe] = 0.45, C/N = 2.21, ^{12}C/^{13}C = 14. The ^{12}C/^{13}C ratio for a star of the RS CVn-type is determined for the first time, and its low value gives a hint that extra-mixing processes may start acting in low-mass chromospherically active stars below the bump of the luminosity function of red giants.

Key words: stars: RS CVn binaries, abundances – stars: individual (λ And = HD 222107)

1. INTRODUCTION

The RS CVn-type stars have been studied thoroughly since 1965 when their peculiar light curves were detected (Rodonó 1965; Chisari & Lacona 1965) and a new distinct class of binaries was named (Olivier 1974; Hall 1976). RS CVn binary systems are typically composed of two late-type chromospherically active fast-rotating stars, at least one of which has already evolved off the main sequence (Hall 1976). Tidal forces between the close components make their rotational period to be equal to the orbital period. Similarly to other cool active stars, RS CVn-type variables are remarkable due to large starspots, strong chromospheric plages, coronal X-ray and microwave emissions, as well as strong flares in the optical, radio and other spectral regions. General properties of RS CVn systems are comprehensively described by Montesinos et al. (1988). The photometric brightness variation analysis, Doppler imaging and spectral line analysis of RS CVn stars indicate that starspots may cover more than 20% of their surfaces (Rodonó et al. 1995; Berdyugina et al. 1998b, 2000; Jeffers 2005; Alekseev & Kozhevnikova